



Culture heritage and Gamification in Education.

Cultural monuments for schools

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Culture heritage and Gamification in Education



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PREFACE

The Erasmus KA2+ program entitled “Culture heritage and Gamification in Education” (2021-2023) recognizes cultural heritage through the gamification education as an important tool. The project is related to the utilization of cultural heritage in education, by integrating the strategy of gamification in the modern school. As technology influences and is influenced by culture, and in this context, dialogue between them is more relevant and imperative than ever. The integration of this strategy is dictated by both pedagogical and socio-economic reasons, which stem from the influence of science and technology in the modern world. The digitization of cultural heritage and its integration into various subjects in school should go with an integrated approach to cultural heritage that, instead of isolating it from everyday life, encourages interaction between it and civil society.

The project involves the following partners: NGO I.CO.N (Inclusion in COmmuNity), Rhodes Greece (Coordinator), Department of Philology, Democritus University of Thrace, Komotini Greece, Geniko Lykeio Iasmou, Rodopi, Greece, SME V.E.M. SRLs, Pellaro Calabria, Italy, Istituto Istruzione Superiore "P. Mazzone" school, Roccela, Calabria, Italy, NGO Associació Meraki Projectes de València, Valencia, Spain, IES El Sobradillo School, Sobradillo, Tenerife, Spain, NGO Edrase Chalki, Greece.

In this context, the Coordinating Team of the “Culture heritage and Gamification in Education” created the Digital Edition of monuments. In this edition, 90 monuments were selected to be published from three countries, including in Part I, the methodology frame of utilization of cultural heritage in education through the gamification strategy (Pedagogical frame, bibliography, researches from Europe and Greece, Italy, Spain) already designed by Democritus University of Thrace-Department of Greek Philology School of Classical Studies and Humanities. The particular action is considered to have been an excellent opportunity for a constructive and creative dialogue on issues of common interest and concern, as to educational methods and tools. We do hope the Digital Edition will add value in addressing the exciting world of the implementation of gamification in Education.

In this context, the Coordinating Group of "Cultural Heritage and Gamification in Education" created the Digital Edition of monuments. The following teachers from each school collaborated to develop the material:

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PART I: The methodology frame

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The use of games is internationally recognized as a good practice for increasing learner motivation and engagement in the learning process. Gamification, the use of game design elements in non-game contexts, helps develop higher-order skills such as critical thinking, synthesis, and information analysis. The evolution and effectiveness of educational games, combined with the high motivation and pleasure they offer for the user, has given impetus to the development of gamification methodology. The gaining prevalence of gamification comes from confidence in its capability to cultivate inspiration, provoke changes, create well-disposed rivalry and coordinate effort in various settings including client commitment, worker execution, and social reliability. More specifically, gamification methodology offers a framework/guide for designing interactive activities in order to maximize motivation, create a pleasant experience for the learner, and maintain his/her interest and engagement. In this context, gamification exploits games for purposes beyond that of entertainment.

Gamification methodology uses incentivization mechanisms (such as reward points, prizes, and leaderboards) and aims to enhance the learner's interest and will to learn. At the same time, mobile devices, due to their advanced features, are an effective means of implementing applications that incorporate features and elements of gamification methodology. In particular, mobile devices make the educational gamified application highly suitable and effective for motivating users. Gamification allows the learner to set his/her own training objectives and to be guided in shaping attitudes and behavior through self-observation and self-evaluation. The learners have the opportunity to define their own goals, design a series of strategies and actions, interact with the educational content and environment, and directly recognize the results of their actions so that they can perceive correct and incorrect decision choices. The above are basic principles and processes of the self-regulated learning model, according to which the individual himself regulates his/her behavior, determines his/her goals, observes, directs his/her own decisions, and evaluates the consequences of his/her behavior.

Current technologies that drive modern e-Learning and m(obile)-Learning platforms already incorporate many of the above elements and principles, thereby offering personalized content and providing a learning experience carefully tailored to each user. Mobile learning is a consistently trending domain mainly due to its ability to maintain a constant link with the user. Micro-content offers the perfect platform to apply gamification and significantly improve positive patterns in user retention. Every learning task or objective can be designed to pose the right challenge, requiring a timed response and offering an adequate reward. The cognitive effort for each gamified aspect can be balanced within the context of a game, which should be difficult enough to maintain a learning curve that efficiently blends fast-paced learning with entertainment. Application of the rule “easy to learn but hard to master”—while also providing mechanisms that acknowledge excellence and skillfulness—can foster a competitive atmosphere that attracts fast learners and students seeking a challenge. Furthermore, gamifying team effort by assigning roles, coordinating individual tasks and creating collective goals with bigger rewards can attract a greater social group of users and learners. In this context, gamification can be an effective educational tool that develops collaborative learning by placing users in multi-player environments. Simulating goal-oriented scenarios in virtual spaces allows learners to experience, explore, and create together while competing between themselves and other

teams. Such contexts can stimulate knowledge exchange and help develop interpersonal skills such as negotiation, problem resolution, collective thinking, and collaborative decision-making.

We propose a conceptual framework that connects the gamification methodology with the model of self-regulated learning and the potential of mobile devices to provide new possibilities for the wider use of this methodology in education, foremost in the field of cultural heritage concerning legacy, memories, physical places, objects and intangible beliefs and practices as a key to identity, well-being, decisions and actions.

The framework proposed in this project is based on existing knowledge and experience regarding the adoption and application of such practices in education. It provides important knowledge and guidance at all stages of development (design, development, implementation, evaluation). By exploiting the specifications of mobile devices this project will incorporate gamification principles and orchestrate game-based learning and self-paced learning principles in order to foster higher-order thinking skills. This will gradually enable the educational community to upgrade the quality of the educational process, putting the learner at the center of interest in order to enhance his/her motivation and interaction. Moreover, the reuse of the proposed conceptual framework will boost the ever-increasing development of high-level thinking skills, upgrading the skills of 21st century citizens, which will in turn bring multiple long-term benefits to education, the economy, and society as a whole. Moreover, all the researchers tell us that kids learn things through play: they learn to interact with each other, to follow rules, the executive functions and problem-solving skills. Video games are successful because they seem to address today's approaches to challenges and are consistent with the needs of our time (Shapiro, 2018; Mariotti & Marotta, 2020; Singh 2021).

1. Digital game based learning and its role in high level thinking skills training

As mentioned above, the use of games is recognized by existing literature as a good practice to increase learner motivation and engagement in the learning process. Digital games, as presented by Prensky (2001), achieve the engagement of learners in learning process through an interactive entertainment and fun environment. Although the terms fun and enjoyment could be used interchangeably, these two concepts differ one from the other. Fun is a positive emotional or psychological state that an individual can have during or after a spontaneous and enjoyable activity. On the other hand, enjoyment is the activity itself, irrespective of the emotional or psychological change as its result. In our daily lives, there are various activities that can create fun. Some of the activities are goal-oriented, but many are not. Some activities involve more than one person, but others can be carried out by one person. Both traditional forms of games as well as a classroom can and should aim at encouraging participants, either players or students, to create such an environment.

The gamification methodology is directly related to digital games, the principles of which form the basis of its design. Specifically, gamification methodology refers to the use of game practices and elements in business and educational environments in order to enhance user motivation and achieve the learning or business purpose more effectively.



The term “Digital Game-based Learning”, first appeared by Prensky (Prensky, 2001), was used to describe the combination of fun and connection through the use of technology-enhanced educational games. According to the international bibliography, digital educational games should be distinguished by the following characteristics. According to Din (Din 2006) they should:

1. be immersive
2. have a graduated degree of difficulty
3. be attractive, set high goals for learners and foster competition
4. have clearly stated educational objectives
5. allow learners to monitor their progress

According to a recent EU directive, high-level thinking skills are considered an essential attribute for 21st century learners. Consequently, learner-centred models of education have now become a focus of interest for both educators and researchers.

The term high-order thinking refers to operations that take place at the highest level of the cognitive processing hierarchy according to Bloom's (revised) taxonomy (Anderson & Krathwohl, 2001). These skills emphasize mental processing and elaboration and refer to the ability of learners/people to be able to manage/process information and ideas and transform them into ideas and propositions. This process requires grouping and comparing facts and prior knowledge, synthesizing results, developing hypotheses, generalizing and verifying conclusions.

Three of these skills are: Problem Solving, Critical Thinking and Creativity.

“Problem solving” is the process of searching and finding the most appropriate way that will prevent the individual from interfering obstacles and lead him/her more safely and quickly to the achievement of the intended and desired goal. This skill is absolutely basic since everybody throughout his life is oriented towards achieving goals and solving problems (Koliadis 2002a).

“Critical thinking” is the mental and emotional function in which the individual evaluates the reliability of information and decides how to act through reasoning based on all the data that may be available to him/her. Critical thinking helps people organize the large amount of information they receive and come to valid conclusions and successful solutions to problems. Collaboration and interaction among learners can enhance the development of critical thinking (Matsangouras, 2002).

“Creativity” is a complex concept that involves diversity, flexibility, novelty, innovation in the way people think, and the combination of seemingly unrelated concepts to produce an innovative result. Collaboration between people simulating the different ideas they express can enhance the development of critical thinking (Azzam, 2009).

A common feature of the above skills is that they require the application of cognitive processes such as observation, thinking, perception, use of reasoning, synthesis and analysis of information. Moreover, in order to implement the above functions, it is necessary for people to become familiar with these processes through interaction with other people.

2. Cognitive learning theories in digital game-based learning

In the existing literature, the application of the cognitive model in the educational process is considered the best practice to enhance the desire to learn, critical thinking and creativity of each individual. The cognitive model is at the basis of the student-centred learning model (Attar et al., 2001; Rott et. al., 2010) and according to it, learning becomes an experience and is based on the triad: intention, action, reflection (Wilshire, 1990). Therefore, the educational process is a conscious, active, creative practice guided by goals and desired outcomes.

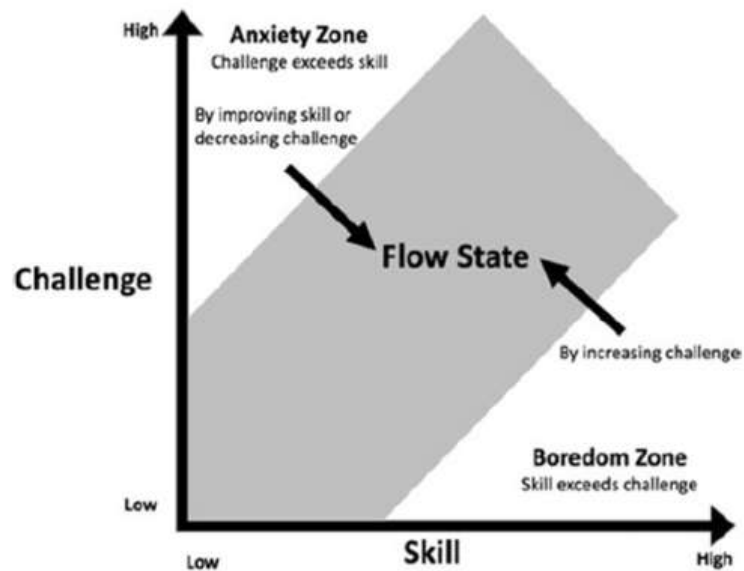
The learner, from being a passive receiver, becomes an active partner/player who participates in the process by (1) his actions, (2) his thinking, his reasoning, and (3) his interaction with others and his environment in an attempt to make sense of the subject he is trying to understand or master. In this light, the acquisition of knowledge becomes a personal affair of the subject, defined and targeted by the individual himself.

Cognitive theory is considered to be the most appropriate for the acquisition of knowledge, skills and abilities through educational games. More specifically, cognitive theory is ideal for personalized learning environments, since the user-learner shapes his/her

environment, but within a strictly structured framework, such as the rules of games. Other features of the cognitive model are the structured and hierarchical goal setting, as well as the inductive process in approaching the final goal with levels, reward policies, etc. Cognitive learning theory, includes a number of concepts on the basis of which the educational intervention is designed. Three components of cognitive theory, which are effectively applied to educational games, are presented below.

a) Self-determination

The cognitive approach to self-determination proposed by Deci and Ryan (1985) states that despite the innate tendency for growth and self-improvement that people possess, the environment itself must provide appropriate support to enable individuals to develop. Self-determination theory is directly related to Csikszentmihalyi's (2000) "flow theory" by matching elements of internal and external motivation. Autonomy (an attribute of self-determination theory) corresponds to the state in which the user chooses his or her own goals and the way to pursue them. Similarly, the concept of competence is related to the balance that must be secured between the difficulty of achieving a goal and the users' abilities in order to maintain the flow in the system. By 'flow' Csikszentmihalyi refers to a situation or experience in which the user manages to focus with dedication on a demanding task. In the flow state, users are fully engaged, focused, creative, productive and with a strong sense of internal satisfaction. McGonigal (2011) argues that the flow state is significantly absent from everyday life, yet it is a dominant feature in games (educational and non-educational). A more modern version of flow theory refers to the state of absolute dedication of the individual to a (single) specific task. According to Csikszentmihalyi, if one's task is too easy, then the user's state turns into laziness. Conversely, if the task is too demanding, then the user becomes frustrated, anxious and usually gives up the effort. For this reason, game designers, trainers and those who design systems that aim to motivate users should take this parameter seriously, and gradually increase the difficulty of the actions, so that as the user gains experience, he or she remains engaged. As stated by Hsin-Yuan Huang, Soman (2013) Gamification is not directly associated with knowledge and skills. Nevertheless, it affects students' attitude, commitment and motivation, which can lead to improvement of knowledge and skills.



Csikszentmihalyi's flow theory (cf. Sangkyun et.al., 2018, 9)

b) Self-efficacy

Self-efficacy is defined as the perception that learners have concerning their ability to plan and implement a set of actions in order to achieve a specific goal or solve a problem under specific circumstances. Specifically, self-efficacy is structured in three dimensions as follows (Bandura, 2002):

- The number of actions that need to be performed in order to achieve the goal (width),
 - the learner's resistance to criticism and the learner's ability to manage unsatisfactory progress (strength),
 - the perceived ability to manage effectively other situations not only in an educational environment (generality).

The sense of self-efficacy influences the activities and projects that individuals choose to implement, based on the perceived degree of difficulty and effort required. Therefore, self-efficacy significantly influences the individual's internal motivation. Individuals with higher self-efficacy usually choose more difficult projects, show perseverance, face potential failure with effort and dedication to their goals (Taylor 2009). In the case of games, self-efficacy is defined as an individual's perceived ability to complete the game successfully (Ritterfeld et al., 2009). Through play, self-efficacy is enhanced as players are able to choose and explore different elements of the game (characters, difficulty level, effects). Consequently, their intrinsic motivation increases and players desire to re-engage in the game (Bjork & Holopainen, 2005). Self-efficacy is enhanced through the individual's participation in small

processes of gradually increasing difficulty (Juul, 2005). For this reason, this theory also highlights the importance of designing games by incorporating small goals and gradation concerning the difficulty. Moreover, providing direct feedback, benchmarking, evaluation of the players and the possibility of interaction between players enhances their self-efficacy and motivation (Bjork & Holopainen, 2005; Bernhaupt, 2010; Salen & Zimmerman, 2004). According to Bandura (2002), among a set of individuals of similar intelligence and knowledge, individuals who excel with a high sense of self-efficacy show increased motivation and commitment to achieving their goals.

c) Self-regulation

According to Bandura's (1986) theory, an individual can regulate his/her own behaviour by observing the reactions of the environment. More specifically, the individual ascertains the socially acceptable or unacceptable behaviours and their consequences (punishment or reinforcement) and regulates his/her behaviour accordingly. Self-regulation takes place in three stages: self-observation and self-direction of behaviour, as well as self-evaluation and conscious awareness of the consequences of evaluating future behaviour. Schunk & Zimmerman (1998) defines self-regulated learning as learning that occurs under the influence of self-generated thoughts, emotions, strategies and behaviours that are oriented towards goal attainment. Self-regulated learning theory is based on the concept of learning as a dynamic and multidimensional process that occurs as a result of the interaction of individual learner factors, the learning context and the learning material (Simons, Van der Linden & Duffy, 2000).

Self-regulated learning allows people to take initiative in their own learning both in terms of how they learn and in terms of the subject matter and objectives of their learning (Gibbons, 2002). Self-regulated learning also describes the process of the educational act itself through which the learner seeks to acquire high thinking skills such as: strategic thinking, goal setting and planning to achieve goals.

A key common feature of all self-regulated learning applications and strategies found in the bibliography is the activation of the learner in the learning process. The learner is not a passive recipient of messages, stimuli and knowledge, but actively participates in the process; often the desire to explore and learn is initiated by the learner.

According to Zimmerman (2001), self-regulated learning is not defined as an intellectual activity associated with specific academic achievement, but as a process through which learners manage to transform their intellectual abilities into skills and knowledge. In this light, education takes on a process that is activated by the learner himself, rather than by environmental conditions (such as the course).

The self-regulated learning technique has primarily been applied in formal education settings. However, the self-regulated learning technique, due to the fact that it allows learners

to have direct connection and control over the educational process, and to perceive their goals and ways of achieving them directly, can be a very powerful tool in terms of non-formal learning environments, as in the case of the present research (Valle et al., 2003). Moreover, the educational use of self-regulation, enhances learners' educational outcomes and critical thinking about linking knowledge to appropriately formulated actions and strategies to achieve specific and clearly defined goals.

Our proposed educational model is based on the theory of self-regulated learning, which allows the learner to set his/her own educational goals, and to be guided in the formation of attitudes and behaviour through self-observation and evaluation. As already mentioned, this methodology is particularly effective in non-formal learning environments, such as educational games and gamification applications (Montalvo & Torres, 2004). The learners have the opportunity to define for themselves their goals, plan a series of strategies and actions through which they participate in the educational game, interact with the educational content and the educational environment, and directly recognize the results of their actions so that they can perceive the correct or incorrect choice of decisions and actions. Through educational games and gamification applications, the learner can directly perceive the correlation between knowledge and its practical application, and has the ability to define for himself the goals he wishes to achieve, and to design a plan to achieve these educational goals. This model is the basis for the development of the present methodology, as it aims not only at the acquisition of skills, but mainly at the formation of attitudes and behavior in achievement of goals generally, not only in the school subject, but overall in real life.

3. Gamification – “the use of game design elements in non-game contexts”– Concept and framework

Game versus play

The term gamification refers to the term *game* and not to the term *play*. In the field of study of games, this distinction is necessary as *game* and *play* are two quite different concepts. The term play refers to an indefinite area where pretence and constructing imaginary worlds are critical factors, while game refers to bounded areas where interpretation and optimization of rules and strategy are sought (Kampmann, 2003). Therefore, according to classical definitions, the concepts of game and gaming are different from the concepts of play and toys, as the former are characterized by clear rules and by competition between users to achieve discrete goals and outcomes (Barr 2007; Juul 2005; Juul 2010). A number of reviews have repeatedly emphasized that gamified applications focus mainly on those design



elements that delineate rules and orient the game towards the goal, with little room for free and exploratory fun (Alfrink, 2011).

Game has been defined as “a rule-based play with determined goals” (Groh, 2012, p. 39), “a set of activities involving one or more players” (Dempsey, Haynes, Lucassen & Casey, 2002, 159), or “a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome” (Salen & Zimmerman, 2004, 80).

Schell (2008) more specifically listed the characteristics of games. Games:

- are entered willfully
- have goals
- have conflict
- have rules
- have win and lose
- are interactive
- have challenge
- create their own internal value
- engage players
- are closed formal systems

Gamification in learning and education

The gamification methodology, although directly related to digital games, does not involve the creation of real games. Instead, it exploits the basic principles of games to achieve emotional engagement of the user. More specifically, the gamification methodology offers a framework/guide for designing activities for the educational game to interact with the user in order to maximise user motivation, create a pleasant experience for the learner and maintain the learner's interest (engagement).

Gamification is defined as the broader application of concepts and techniques from the world of games (aiming at satisfying the user's need for interaction, entertainment and communication) to other areas of activity. Although the gamification methodology is being used in an increasing number of economic activity sectors, with a focus on the entertainment and media sectors, however its application in an educational context is still in its early stages and is mainly focused on the preschool and school age (Johnson, Adams, and Cummins, 2012).

Gamification in learning and education is a set of activities and processes to solve problems related to learning and education by using or applying the game mechanics. Serious games for learning and education are games that are developed for the purpose of



achieving learning and education objectives in the real world. Game players can learn while they are playing the game and have achieved the objectives when they successfully complete the missions in the game. That is, the serious games, with real world problems, are implemented within games. On the other hand, the purpose of gamification in learning and education is to create real-world environments that support learning and problem solving. It is implemented within the real world. Considering the definition of gamification in learning and education described previously, serious games should be included in gamification in learning and education because they are also a set of activities and processes to solve problems related to learning and education by using or applying the game mechanics.

Gamification can enhance higher order thinking skills (Dominguez et al., 2013), declarative knowledge and procedural knowledge (Sitzmann, 2011), and test performance (Faria & Whiteley, 1990; Li et al., 2012; Mayo, 2009; Nah et al., 2014; Randel et al., 1992; Smith & Baker, 2011; Su & Cheng, 2015; Yildirim, 2017). The research showed that the students in gamified courses performed at least 7.2% better than the non-gamified courses.

Many educators experience difficulty in their classes because their students are not motivated and do not actively participate in class activities. Due to practical experiences such as this, motivation and engagement are the topics that educators and researchers have been interested in for a long time. Some researchers found the effectiveness of gamification on inducing psychological and behavioral changes.

Hakulinen et al. (2013), Kumar and Khurana (2012), Li et al. (2012), Nah et al. (2014), and Su and Cheng (2015) all claim that gamified learning can foster students' motivation and engagement. The psychological and behavioral changes resulting from gamification for learning and education are not limited to motivation and engagement. Sitzmann (2011) revealed that gamification promotes self-efficacy and increased retention.

However, in order to define the concept of gamification clearly, it is necessary to list and analyse the sub-concepts included and on the basis of which the concept of gamification is structured. According to Deterding et al. (2011) etc., key sub-concepts that form the basis of development of the term gamification are the following:

- Game: as defined above

- Elements: While serious games describe the design of complete games for non-entertainment purposes, gamified applications simply incorporate the elements of games (Brathwaite & Schreiber, 2008). The boundary that separates a game from a gamification application is often not clear. The addition of an extra rule or a common goal between a group of users can turn a partially gamified application into a full game. Those elements that belong to the set of "game elements" as identified by Reeves and Read (2009) are:

- the representation of the user with avatars,
- the 3D environment,
- the narrative context,



- rating and levels,
- competition governed by clear rules,
- teams,
- parallel communication systems that can be easily regulated, and
- time management.

The concept of Gamification

Gamification is a methodology that refers to the application of what constitutes as game dynamics, mechanics, and features into non-game settings and domains. It is the process of adding game-oriented functionality to processes, programs and platforms that would not traditionally include and facilitate them. In recent years, gamification and the technologies that fuel its implementations have become a leading platform and a reference approach for achieving socialization and innovative communication with various target groups. Bridging the gap between producers of goods and services and consumers, gamification has proved to be a valuable tool for marketing, finance, business communication, training, IT and – of course – leisure and entertainment. Exploring how games connect with skillset acquisition and training, reveals that they play a significant and constructive role in introducing contexts that empower the development of key competences and traits proven very useful for success in real life, learning aptitude, and professional growth.

Gamification works by offering the targeted audiences with missions, directives and feedback through mechanics and activities added to online services and platforms. It almost always aims to build, maintain and manage a virtual community of users that share common goals and objectives. A compelling gamification experience can capture the participant's attention, invoke motivating emotions and project goal-oriented thinking patterns. Such experiences include tasks, actions and scenarios that demonstrate the best route towards completing a short-term objective or a long-term goal. As participants interact with a gamified program or service, they steadily receive gratification and feedback. While the first is commonly lead by a reward policy or a ranking system, the later reports performance stats and often provides the appropriate information for self-assessment. Both target a sustainable feeling of achievement that incentivizes the user to do better and reach harder goals.

Gamification is the strategy for influencing and motivating the behavior of people, which also includes students and trainees. In recent years, it has emerged to be a framework of concepts and mechanisms that can be applied across a wide spectrum of educational contexts and environments, where individuals require motivation to follow through specific learning tasks and activities. It can decisively transfer the challenge attitude and retention pattern of gamers inside a classroom and its students. When challenge is triggered, learning goals become clearer and every learning step is much easier to follow. Reward policies and



incentivization strategies are both very important and go hand-by-hand with gamification. If the student cannot visualize an attractive end or goal to his or her commitment, there is no point in providing gamified mechanisms for the learning process. Focus is commonly established after the reward value has been accepted. Reward should not be one thing that fuels the whole learning experience, but rather a series of benefits that can appeal to the eyes of the students. That is why, what used to be a simple goal or prize, is now structured in a strategy and policy. Instructors and the learning engines of gamified platforms do not simply give out experience points (points students can earn as they play) as rewards. There are rules and patterns that should be followed and adopted to properly gamify a lesson, a project, or an exercise. As an example, rewards can be delivered using leader boards, badges, credits and ranking schemes that encourage students to have fun while competing in performing a learning activity.

Game designers and producers, more than any other type of entertainment creators, have researched the methods to embed their storylines, experiences and rewards inside the thoughts and everyday life of their audiences. Education and self-improvement, both in terms of academic progress and personal growth is an equally if not a more important part of everyone's daily schedule. Making this part a fun part with instant gratification, social involvement and a solid learning impact, is what gamification is able to offer.

Types of Gamifications

Gamification can be classified into types and categories, when examined through different scopes and variables.

- *Structural Gamification - Gamify Your Content* - In the context of a learning program, this type of gamification provides a game-like structure to the content and the overall experience. In this case the content itself is not transformed into a game, but its presentation and delivery method become game-like. While the educational content and material remain the same, the mechanisms that render it to learners adopt gaming mechanisms. It mostly consists of a template-based approach that essentially works in a plug and play manner with already available learning content. In other words, gameplay and educational content are not related, so this allows for greater flexibility, higher efficiency, and easier implementation. This type of gamification includes features such as badges, higher tiers, progress meters, etc. Think of a student's profile and how they can be motivated to achieve 100% profile completion simply by adding elements like topics of interests, favorite books, preferred learning material, etc. using a progress meter and tier levels.

- *Content Gamification- Turn Content into a Game* - Content Gamification is often understood as a 'Serious Game' template where the content is often turned into a game. The learning program's actual "fun" elements are linked to a game application engine and native mechanics. This type of gamification invests more on achieving specific learning goals and objectives, and thus requires higher intellectual capital to design, develop and off course play. When the content becomes a game, the mechanisms in play start to move closer towards the

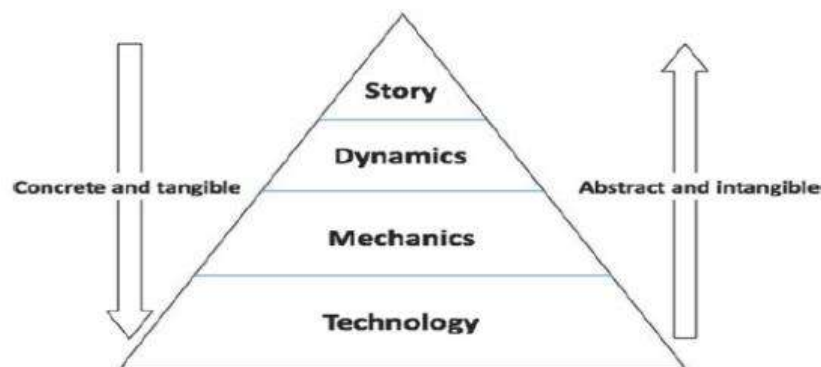


gaming domain and further from a traditional educational experience. This type of gamification is often focused on specialized content and employs sophisticated gaming features to present and convey it. The gamified material is wavered around scenarios and stories that are less flexible as a template and tend to require more time to create and deliver. Content gamification offers a one-time structure, made for a specific type of content. Once developed, it can be only used for that specific learning objective. The respective gamification experience is more intensive and extensive, takes longer to complete and often requires greater skills and performance.

The proposed Gamification framework

We propose a gamification framework which consists of 4 elements:

Story, Dynamics, Mechanics and Technology.



Integrative gamification framework (cf. Sangkyun et.al., 2018, 62)

A. “Story” is a course of events that gamers can experience while playing a game. The story in a game can be developed in a linear structure or a branching structure. Story can be effectively delivered by technology. Most games intrinsically include stories. The story in gamification is not much different from one in novels, movies, or dramas. A difference is that gamers can intervene in and interact with a game. Story strengthens the level of immersion and provides adventures and fantasy that people cannot experience in their daily lives. Story plays a role of the center axis that integrates fun experiences in a game. Gamers can experience adventure, competition, discovery, or other kinds of fun aspects planned and arranged to support the story in a game. Because of the story, gamers may continue thinking they are playing the game even when they are taking rest

B. “Dynamics” are a gamer’s experience attained through a game. Dynamics gives learners fun



derived from the story. The purpose of the dynamics is to motivate learners to engage in learning. Some categories of Dynamics are *Captivation*: Experience of forgetting one's surroundings, *Challenge*: Experience of having to develop and exercise skills in a challenging situation, *Competition*: Experience of victory-oriented competition against oneself, opponent, or system, *Completion*: Experience of completion, finishing, and closure, in relation to an earlier task or tension, *Control*: Experience power, mastery, control, or virtuosity, *Discovery*: Experience of discovering a new solution, place, or property, *Fantasy*: Experience of make-believe involving fantastical narratives, worlds, or characters, *Simulation*: Experience of perceiving a representation of everyday life, *Relaxation*: Experience of unwinding, relaxation or stress relief, calmness during play.

C. "Mechanics" describes the rules and procedures for a game. It defines the gamers' behaviors, rewards, and penalties in a game. The rewards and penalties affect the development of a story. There is no mechanics in novels, movies, and dramas since readers or audience cannot intervene in the story development. Mechanics implement dynamics at the level of data and algorithms. There are elements that learners can directly recognize in a game or gamified system. Learners receive feedback and rewards through the mechanics.

The main mechanics used in gamification as proposed by Werbach & Hunter (2012) are as follows:

- *Competition*: The gamification framework includes the emergence of a winner, who is recognized due to his/her overall performance. This creates an environment of competition between players/users, who strive to perform at their best in order to increase their chances of being named as winners. The practice acts as a motivational mechanism, complementary to leaderboards (presented below), by providing more details about each player's performance (speed of completing each action or challenge, etc.).

- *Cooperativity*: gamification systems often incorporate elements of cooperativity. This practice enhances users' skills and abilities to act as a team and cooperate with other users of the system to achieve common goals.

- *Badges*: badges are a scale of points earned each time a user successfully completes a mission assigned to him/her by the system. They represent his/her achievements and success and encourage their collection (Gnauk et al., 2012). Badges also act as a reminder of prior achievements as they represent evidence of prior successes. These attributes confer confidence and self-efficacy. The interaction between status and affirmation shows that



badges can engage the user emotionally at both an individual and group level (Antin & Churchill, 2011). Therefore, badges enhance both intrinsic and social motivation (Antin & Churchill, 2011; Halavais, 2012).

- *Leaderboards*: leaderboards allow users to track their progress against other players. Leaderboards therefore make a double contribution to the design of gamification systems, as they enable users to benchmark their performance, while at the same time providing incentives to improve it and enhance their competitiveness. However, according to Werbach & Hunter (2012) and Zichermann, 2011 in cases where the player reward system is not properly designed, leaderboards seem to have a negative effect on player motivation. For example, a user who consistently underperforms others in a system that has very high goals (which his/her teammates can complete while he/she cannot) feels frustrated and is likely to leave the system.

- *Level*: levels are another way of identifying a user's progress and performance. A user's level symbolizes either the degree of personal development and progress, or the comparative ranking of a player in relation to all players in the system (Werbach & Hunter, 2012; Zichermann, 2011). Furthermore, they act as a tool for setting personal goals by signalling progress regarding the difficulty and thus increasing the individual's self-efficacy (Church 2001; Covington & Omelich, 1984; Elliot, 1994). They therefore activate both intrinsic and social motivation.

- *Challenges*: they refer to actions that require special effort from the user in order to be successfully completed (Werbach & Hunter, 2012). Their aim is to provide additional motivation to the user to make further progress and successfully respond to the increasing demands of the system. In the context of the challenges presented, within a gamification environment, additional guidance is provided regarding the actions to be taken by the user (Zichermann & Cunningham, 2011).

- *Reward points (points)*: The ability to collect points/reward points is the most widespread practice, being used in 84% of gamification applications. Users earn reward points every time they manage to complete successfully a "mission" given to them by the system. The points act as a score, feedback and an indication of user performance and progress. At the same time, the use of points provides useful feedback to the designers of gamification systems to further improve them and enhance user motivation.

The use of points/reward points is the most widespread good practice for the design of gamification systems and applications. This is due to the significant potential that this

practice can offer to a gamification system, both to the user and to the designer and administrator of the system. As far as the user himself is concerned, the collection of points is a good way/tool to evaluate his performance. Every time the user earns points, he perceives that his performance is satisfactory. The use of points is a flexible way of providing feedback information to the user and can be used in different ways: as a scoring system, as an indicator to measure progress and efficiency, as a ranking scale, as a tool for setting goals or even as a kind of virtual currency. Points encourage the acquisition of knowledge from the game (Bleumers et al., 2012) and trigger competition which ultimately results in a change in the user's position (Church et al., 2001; Elliot, 1999; Festinger, 1954). Zichermann and Cunningham (2011) categorized the different categories of points that a user can earn when participating in a gamification system based on the goals they serve.

Specifically:

Experience points: these points reflect a user's ranking and performance. In order to earn experience points, the user must successfully complete an action indicated by the system. These points cannot be redeemed, lost or reduced. On the contrary, they are constantly increasing and there is usually no upper limit to the number of points a user can accumulate.

Virtual goods are one of the most engaging gamification mechanics. Such virtual gifts can be linked to learner's achievement motivations. Learners engage more with content that leads them to greater achievements, since they prefer earning and owing more and better virtual goods. For such a mechanism, the instructor must quantify learner's contribution and attribute virtual goods if when he or she achieves a certain level. Instructors can also provide special challenges for learners that are eager to compete and earn special virtual goods. Virtual goods work as positive reinforcement for learner's good performance or regular participation. The practical implication for a designer is to provide a virtual goods exchange interface and display the earned virtual goods in the learner's personal or profile page.

Redeemable points: Users can exchange/redeem these points, or part of them, for system items or even real products and items (such as gifts, money, status). The integration of redeemable points in a gamification system creates real value for the participants and contributes to the development of a virtual economy (virtual economic system). Instructors can allow learners use the points accumulated to redeem real world' rewards e.g., course material, items, toys, and game software to enhance the course participation. From a designer perspective, they are required to offer a simple and clear user interface to assist learners redeem gifts. This interface should also display the redeemable points status and include

reminders to learners for how far they can proceed to the next level of rewards.

Reputation points: This category is the most complex, usually expressing the user's credibility and is used to create a sense of mutual trust among the members of the system.

- D. “Technology” makes mechanics tangible and visible to learners. Learners can interact with a game or gamified system through technology. Technology in gamification includes hardware, software, network, and other objects.

Gamification requires experts from a variety of fields. Kapp (2012) suggests a manpower planning model for gamification. The model consists of ten groups: project manager, instructional game designer, subject matter expert, artist, music and sound technician, animator, level designer, programmer, information technology representative, and representative of learner population. The following table shows the roles and responsibilities of each group:

Roles	Responsibilities	Notes
Project manager	Manages project scope, schedule, cost, quality, manpower planning, communication, risk management, and resource provision	
Subject matter expert	Provides content Reviews final outcome	
Instructional designer	Designs instructional strategies and learning processes Determines if game dynamics and mechanics are in accord with the instructional strategies	
Story designer	Creates stories for gamification	
Game designer	Designs game dynamics and mechanics Determines if implemented games and tools are in accord with the game mechanics	
Programmer	Develops game software Integrates game software with existing systems	Mostly for game software development projects



Graphic designer	Creates 2D and 3D graphics Creates avatars, characters, and background images	
Music/sound technician	Composes background music Produces sound effects	Mostly for game software development
Tool developer	Develops tools for gamification in the form of board games or war games Makes printed materials, dice, game boards, and other types of tools	Limited roles in game software development projects
Quality manager	Manages the quality of the work in process and the final product Manages each test phase (alpha, beta, and pilot)	
Information technology representative	Knows existing IT systems and integrates new game software with the existing systems Solves information security issues	Mostly for game software development projects
Representative of target learner population	Participates in all development phases and suggests opinions from the user perspective	More representatives can provide more various opinions

Manpower planning for gamification development projects (cf. Sangkyun et.al., 2018, 94)

4. Mobile learning and Mobile devices

Mobile learning is a flexible learning model that supports the immediate delivery of personalised educational content, tailored to the needs and profile of the learner and the relevant environment (Brown, 2005). According to Van't Hooft, Swan, Lin & Cook (2007) mobile technologies support learning in a connected environment, with access to educational content from any place and at any time. Furthermore, mobile learning has been recognized as a form of technology-enhanced learning, which effectively supports the learner's interaction with the educational content (Moran & Dourish, 2001).

At this point, it is useful to present and analyse the key features and capabilities of mobile devices (Clarke, 2001):



- *Ubiquity*: the ability of the user to access content available on the internet, at any time and from any place. This capability, in an educational context, can bring significant advantages and opportunities such as learning in any environment/place/moment, supporting formal and informal learning, thus increasing both the effectiveness and productivity of learners. Moreover, this possibility makes it possible to provide immediate feedback to learners.

- *Positioning*: The ability to identify the geographical location of the user. Through mobile devices, it is possible to identify the geographical position of the user. This possibility provides important opportunities in the field of education, such as the possibility to adapt educational content (for example, linking educational content to local culture). In addition, it offers educators the possibility to know the exact location of the users during their interaction with the educational content, and to draw useful conclusions about their preferences, conclusions which they can incorporate into their overall educational design.

- *Interactivity* (Kakihara, & S0rensen, 2001): the possibility of multiple interactions among learners and the instructor.

- *Personalisation* (Abowd & Mynatt, 2000; Lyytinen & Yoo, 2002; Rao & Minakakis, 2003): the ability to deliver content based on the user's preferences and profile.

As can be seen, mobile devices offer a plethora of possibilities and opportunities in the field of education and, if properly exploited, can significantly enhance the quality and effectiveness of any educational approach. The following are the key benefits that mobile devices bring to education:

- *Training can take place from any place, at any time* (Shuler, 2009). Nowadays, the majority of learners always have a smart mobile device with them, which has access to the internet. Therefore, they can access the educational content at any time, in any geographical location, and it is not limited to the agricultural boundaries of the classroom.

- *They support personalization* (Shuler, 2009 and Klopfer & Squire, 2008): smart mobile devices can support personalized educational content, based on the profile and needs of each learner, as captured and identified by their interaction with the mobile device.

- *Portability* (Pea & Maldonado, 2006): mobile devices, due to their size, are easily portable, while nowadays they can support complex and sophisticated functions that enhance the educational process.

- *Mobile devices support both formal and informal learning* (Peters, 2007).

The following table presents the basic characteristics of mobile devices and their matching with the gamification methodology.

Mobile device Gamification principles

Ubiquity Providing formal and informal education
Access to educational content at any time/from any place.
Immediate feedback
Strengthening critical thinking and problem-solving skills

Positioning Providing appropriately formatted educational content

Interactivity Social factor of learning.
Motivation
Enhancing collaboration and collective decision-making.
Interaction with other learners and the educational content itself

Personalization Providing educational content based on the needs and profile of the learner.

Users have control over mobile devices Learners are able to track their progress and compare their performance with that of other learners.
High learner engagement
Minimize technical problems, familiarization with the learning environment.

They provide an immersive environment The learning environment should be immersive



For the effective implementation of a gamified educational application in mobile game based learning environments, the following are required:

- the appropriate use of gamification mechanics to structure the educational game and enhance the learner's external motivation,
- the connection and exploitation of the features of mobile devices.

The proposed conceptual framework incorporates gamification principles by orchestrating principles of game based learning and self-paced learning for the emergence of high thinking skills by exploiting the specifications of mobile devices concerning especially “Cultural Heritage”.

5. Cultural Heritage

What is cultural heritage

Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural Heritage is often expressed as either Intangible or Tangible Cultural Heritage (ICOMOS, 2002).

As part of human activity Cultural Heritage produces tangible representations of the value systems, beliefs, traditions and lifestyles. As an essential part of culture as a whole, Cultural Heritage, contains these visible and tangible traces from antiquity to the recent past.

Tangible Cultural Heritage types

- Built Environment (Buildings, Townscapes, Archaeological remains)
- Natural Environment (Rural landscapes, Coasts and shorelines, Agricultural heritage)
- Artefacts (Books & Documents, Objects, Pictures)

Driving force behind all definitions of Cultural Heritage is: *it is a human creation intended to inform* (John Feather, 2006).



(http://www.cultureindevelopment.nl/cultural_heritage/what_is_cultural_heritage)

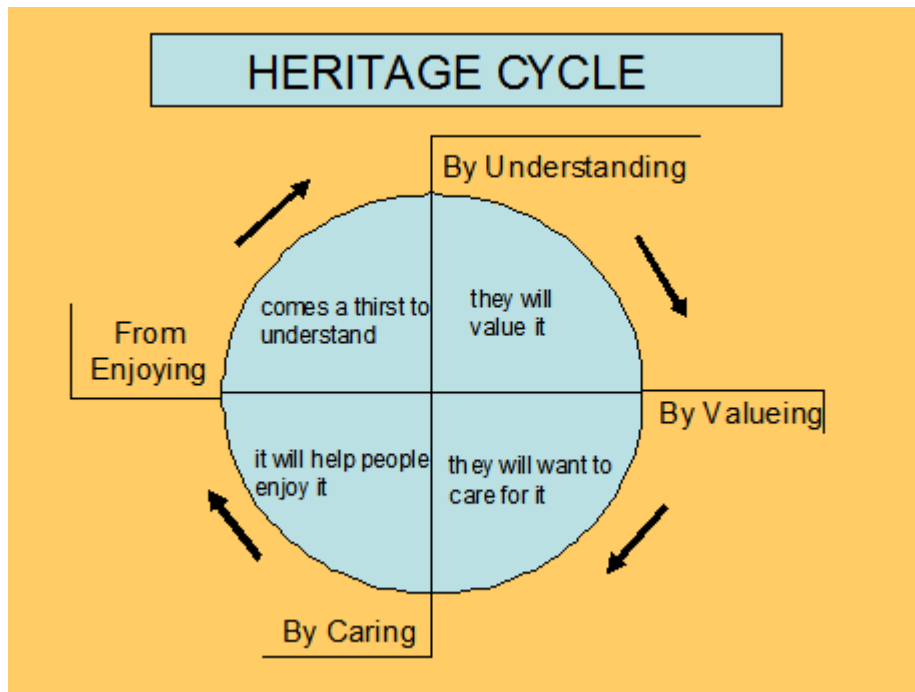
Intangible heritage

It includes voices, values, traditions, oral history. Popularly this is perceived through cuisine, clothing, forms of shelter, traditional skills and technologies, religious ceremonies, performing arts, storytelling. Today, we consider the tangible heritage inextricably bound up with the intangible heritage. In conservation projects we aim to preserve both the tangible as well as the intangible heritage.

The Heritage Cycle

The Heritage Cycle diagram gives us an idea how we can make the past part of our future (Thurley, 2005). In a clockwise direction the wedges and arrows read:

- By understanding (cultural heritage)
 - people value it
- By valuing it
 - people want to care for it
- By caring for it
 - it will help people enjoy it
- From enjoying it
 - comes a thirst to understand
- By understanding it.....etc



(http://www.cultureindevelopment.nl/cultural_heritage/what_is_cultural_heritage)

Heritage Culture can give people and foremost to the younger generation a connection to certain social values, beliefs, religions and customs. It allows them to identify with others of similar mindsets and backgrounds (Hoffman, 2006). Cultural heritage can provide an automatic sense of unity and belonging within a group and allows us to better understand previous generations and the history of where we come from. Some additional important elements of culture heritage are:

- It gives us the communal support: Those that identify strongly with a certain heritage are often more likely to help out others in that same community.
- The spirit and direction of a nation are found and reflected in its historic heritage.
- It provides a sense of belongingness: Cultural Heritage keeps us attached to our religion, traditions, and beliefs and prevents younger generation from joining the wrong company. In today's context we refer to a cultural identity (feeling of) as a group or culture, or an individual as far as he or she is influenced by his belonging to a culture.
- Sense of unity: Culture is one of the key measures that provide an automatic sense of unity within groups. The media and public culture states that, "Culture provides sense of unity in the community. It helps our children to understand better about the character of their parents and grandparents. It helps to introduce us to people with the same mindset or values." For instance, if the future generations come to know about our unique culture and traditions, they will automatically have the sense of responsibility and understand better about our culture.
- Sense of personal identity especially in large cities where there are large communities with different culture and backgrounds.

- Identify with others of similar mindsets and background.

Cultural heritage allows the people to know about other people who have the same kind of background and mindsets. The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2002) described that “cultural heritage allows identifying each other by distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs”. Through cultural heritage we can know easily the people of other community by identifying the culture and similar mindsets.

- Sense of respect for the other: Since Cultural heritage allows us to identify various cultures realizing and understanding both differences and similarities among them, we can show respect for them and tolerance. Nowadays this is an immediate necessity especially for the younger generation as nationalist movements are on the rise.

See also:

Culture in development (2009). Retrieved from http://www.cultureindevelopment.nl/Cultural_Heritage/What_is_cultural_Heritage.

ICOMOS, International Council of Monuments and Sites (2002). International Cultural Tourism Charter. Principles And Guidelines For Managing Tourism At Places Of Cultural And Heritage Significance. ICOMOS.

Importance of Cultural Heritage (2013). Retrieved from: <http://www.cultivatingculture.com>

The Importance of culture Heritage (2015). Retrieved from <http://www.cultivatingculture.com/2013/05/05/the-importance-of-cultural-heritage>.

Regarding Greece ancient monuments or antiquities mean all cultural goods dating back to prehistoric, ancient, Byzantine and post-Byzantine times till 1830. Recent monuments, later than 1830, are protected because of their historical, artistic or scientific importance.

Cultural heritage equals civilization itself. And it needs to be preserved. Greek law states clearly that a) the protection of the cultural heritage of the country consists mainly of the identification, research, recording, documentation and study of its elements; b) the preservation and prevention of its destruction, alteration and generally any direct or indirect damage, c) the prevention of illegal excavation, theft and illegal extraction, d) its conservation and any necessary restoration, e) the facilitation of public access and communication with it, f) its promotion and integration into contemporary social life, education, so that public awareness of cultural heritage is achieved. The protection of monuments, archaeological sites and historic places shall be included in the objectives of any level of spatial planning, development, environmental and urban planning or plans having an equivalent effect or their substitutes. A historic site is not historic just because of the material remains in it but also because of the meaning it holds, because of the history (or histories)



kept in it and because of the intangible heritage that is hidden behind the material remains. So, it is necessary to create awareness about Cultural Heritage and the ethics of its care in study curriculum and to identify tools that can be developed to help communities in better understanding and conserving their heritage. It is obvious that, among other things, cultural heritage needs to be studied, so education must mandatorily contain such orientation.

The utilization of cultural heritage in education through the gamification strategy aids in familiarizing young people and adults with specific cultural heritage topics, such as ancient history or archaeology, and significantly in increasing their interest levels, their engagement by supporting them as players to achieve learning targets through a fun experience. The fun aspect of a serious game provides engagement and can be determined by several factors like storyboard, graphics, usability, collaboration/competition mechanisms, and interaction devices as mentioned above. The learning aspect should implement a pedagogical approach, by structuring the educational content and organizing its presentation. An appealing and meaningful environment, a compelling narrative, and a suited and intuitive interaction paradigm are the three main elements to create engagement.

Moreover, such educational digital games for cultural heritage seem particularly suited for the affective domain. Empathy with a game character and plot may be very helpful to understand historical events, different ancient cultures, other people's feelings, problems, and behaviors, on the one hand, and the beauty and value of the past, architecture, art, and heritage, on the other one. As pointed out by Mortara et al. (2014), adventure games are particularly suited to implement the "learning by doing" approach (Dewey 1938), which is related to the constructivism theory, where the player learns by constructing knowledge while doing a meaningful activity. In this approach to education, the learner does not passively receive information – as in a simple explanation, a panel or a virtual reconstruction although accompanied by a description – but rather actively constructs new knowledge by finding information in the game, understanding it, and then applying the new knowledge to fulfil tasks (Boyan, Sherry 2011). As underlined in Froschauer (2012), players remember more the knowledge related to task completion than information directly provided by the game. These games allow also a personalized approach to learning: except for games located in exhibitions or designed as mobile applications for augmented visits, all the other games can be consumed at home or school, or both; a game can even be played partially at school, in small groups and with the support of the teacher, and partially at home for example as a tool to review the acquired knowledge.

The proposed gamification framework encourages the creation of a useful, educational and entertaining digital tool for the contact of students and young people with elements of their cultural heritage, enhancing so the attractiveness of young people's education on heritage monuments, strengthening the respect for the preservation of their cultural heritage, and developing recognition and respect for the cultural heritage of other nations as an element of our common European cultural heritage and identity. Furthermore this digital tool will be useful for the development of tourism and for the promotion of monuments of our cultural heritage.



As for tourism purposes let us consider, for instance, an archaeological site: tourists may visit it and then go back home. If they are particularly interested in the historical context and/or amongst those who grow a particular fascination with the remains, they may be interested in coming back for a second visit or in developing their own research and curiosity afterwards. This is unfortunately a very rare occurrence. An educational digital game offers the opportunity to expand visitors' time on the site and it can provide further information about it (potentially much more than any guide can do during a generic visit – and providing more fun than a book for the majority of people). Moreover, it gives players the chance to choose when to access that information: in some cases, it can be done before the visit, in others after, but nothing prevents them to do it even during the visit. Serious games can be adjusted and conceived to offer a tailored experience and to overcome time and space limitations, especially given that the great challenge of our time is to move from a mass-oriented approach towards a personalized experience (Mortara et al. 2014). However, the benefits of serious games applied to archaeological heritage are not limited to a post-visit moment. As we have seen, they can actually be extremely convenient to engage a larger and more diversified audience and by doing so, to attract the public and bring people physically to specific places. In this sense, and by linking the touristic benefits to the educational ones, teachers can also use serious games to prepare the visit to a specific site or museum and, in particular circumstances, they can also be used as a temporary substitute for the visit (e.g. in case of bad weather referring to open-air archaeological sites or under any other inconvenience).

Mortara, Catalano, Bellotti, Fiucci, Houry-Panchetti, Petridis (2014) recognize the importance of digital games usage for preservation of intangible cultural heritage. They differentiate three categories as shown below namely, cultural awareness, historical reconstruction and heritage awareness and they assess available serious games in those domains as well as their educational objectives. In addition to knowledge behind traditional skills, cultural awareness category encompasses oral traditions and expressions as well as habits related to nature and world in general. Various ancient cultures are explored through serious games and allowed users to observe their influence on the contemporary cultures or simply be aware of the historical events, processes, or even entire periods in human history. In addition, users could explore contemporary cultures prior to travelling by means of digital games whether that be related to architectural or natural environment. Depending on a design of serious game it could provide future traveller virtual exposure to chosen culture enriched with plethora of cultural tasks such as language, music, dance, religious ceremonies, customs, and similar.



Cosovic & Ramic, 2020. https://www.researchgate.net/publication/338250291_Game-Based_Learning_in_Museums-Cultural_Heritage_Applications/figures?lo=1.

Let us take an example about gaining and controlling knowledge on a monument, its history, architecture, function, use, and afterlife in connection with its values and traditions (intangible heritage) through the proposed gamification framework.

The monument is the ancient theatre of Epidaurus, the most beautiful open theater in the world and of course a UNESCO World Heritage Site in Greece.



Ancient theatre of Epidaurus

According to the gamification framework we propose:

Story:

The learner gets involved in a story placed in ancient times. There is a narrative section, e.g. the narrator gives information about the history of Epidaurus, which is strongly associated with the healing god Asklepios. According to ancient Greek mythology, Epidaurus was the birthplace of Asklepios, the healing god, and son of Apollo. In fact, Epidaurus was home to the most popular healing center of antiquity. During the 4th and the 3rd century BC, this building was enlarged and partly reconstructed by the Romans. Famous as an important healing center, the Asklepieion of Epidaurus used to gather sick people from all over Greece. The learner who has some skin disorder comes to Epidaurus to get a miraculous cure. He has to stay there and undergo some treatment, especially to get the most benefit from bath-based treatments and gym. He has also the possibility to participate as a spectator in games which take place in the stadium of Epidaurus and the theatrical performances in the Ancient Theatre, both as part of religious festivities. Through the narration or in interaction with other characters (other patients, athletes, priests or actors) the learner gains and controls knowledge on ancient medicine, religious festivities, ancient athletics and of course on the architecture of ancient theatre, its parts, the plays, the dramatists and s.o.

Alternative 1: „A Performance at Risk“. The learner watches an ancient performance at the ancient theatre of Epidaurus, during which an object, essential for the continuation of the performance, is lost. He takes it upon himself to help find the object to save the performance. He is involved in a series of tests, coming into contact with other spectators, the actors, the lessee of the theatre, the stage director, the judges, etc., who help him or put obstacles in his way to find the lost object. Correctly following the steps indicated or overcoming obstacles, he learns and consolidates his knowledge concerning the architectural parts of the theatre, the machinery, the costumes, the masks, the parts of the drama, the plot of the play in question and so on.

Alternative 2: „Crime at the Backstage of the Ancient Theatre of Epidaurus“. The learner as a detective tries to unravel a mystery about the murder of an actor one day before the presentation of a drama. He has to solve problems, to answer questions, to get involved in a series of tests coming into contact with the people of the theatre who help him or put obstacles in his way to find the murderer.

Dynamics will give the learner fun derived from the story and motivate him/her to engage in learning. Through *Captivation, Challenge, Competition, Discovery, Fantasy, Simulation*.

In the part of Mechanics we will have the rules and procedures for this game. Answering questions, accomplishing tasks, defining, evaluating, facing and solving problems by

selecting solutions are in connection with the development of the story, whereas rewards and penalties affect the development of a story. Learners will receive feedback and rewards.

Technology: The appropriate software, network, and use of other objects will secure the efficacy of the game.

During the meeting “Learning, Teaching and Training Activities” on Cultural heritage and the educational dimensions of gamification (Tenerife, 11-15 October 2021) all the members of the project “Culture heritage and Gamification in Education”, Erasmus+ KA227 - Partnerships for Creativity (project code 2020-1-EL01-KA227-SCH-094519) decided to adopt the proposal of Spain concerning the *General Story*. All three countries (Greece, Italy and Spain) will share the same *Story*. The narrative is as follows:

“The year is 2121. It has been more than a century since mankind overcame the last pandemic it had to face. Unfortunately, in recent months, outbreaks of a strange disease have appeared throughout Europe: DUMBID-2121. Its symptoms resemble those of a simple cold. But with each new sneeze, those affected seem to lose part of their mental capacities until they forget everything they have learned in their lives. Luckily, you belong to a joint international force of Spanish, Greek and Italian doctors who, after much research, have concluded that the cure for this new challenge facing humanity is hidden in the Cultural Heritage of their countries. Therefore, you have been chosen as one of the future saviors of humanity. Your mission will be to go through different representative locations of our Cultural Heritage, examine them carefully and find the keys to the cure for DUMBID-2121. The future of your country, Europe and perhaps the world rests on your shoulders - may culture be with you!”.

The purpose in designing this game is not only the acquisition of knowledge or the consolidation of the acquired knowledge on a monument, its history, architecture, function, use, and afterlife but also in connection with its values and traditions (intangible heritage) the ‘active social protection’, that is, a cultural and participatory growth, which leads to responsible social behavior respectful of monuments, of landscape and environment.

PART II: Our cultural heritage

Monuments of Greece

1. Leonidas Sculpture

Title monument of	Leonida Sculpture
Kind of object	Object from museum
Place	Archaeological Museum of Sparta, Greece
Date creation of	490-480 BC
Creator	No reference
Description	Leonidas is a sculpture of a warrior made of Parian marble. It was found in the Acropolis of Sparta. The sculpture features a helmet with ram-shaped cheek parts. The smile on its face represents the pride of being Spartan warrior and the courage of Spartans in the face of death. The sculpture was named "Leonidas" after the Spartan king Leonidas who led the 300 Spartan soldiers at the battle of Thermopylae in 480 BC, in the war between Persia and the Greek city-states.
Conection with my country, school subjects	Leonidas and his soldiers are admired in all Greece because they died trying to block the Persian invasion of Greece. The statue was originally placed at the National Archaeological Museum in Athens, and was transferred around 1938 to the Archaeological Museum of Sparta. It is a statue of archaic art and it is considered one of the most perfect sculptures of Laconian art. School subjects: History, Arts
Resources	Britannica encyclopedia, Battle of Thermopylae Date, Location, and Facts Britannica , (accessed 07/01/2022). Greek Ministry of Education and Religious Affairs http://ebooks.edu.gr/ebooks (accessed 07/01/2022). University of Cambridge https://museum.classics.cam.ac.uk/collections/casts/leonidas (accessed 07/01/2022).



Photo/os



Spartan warrior, the so-called Leonidas. Exhibit of the Archaeological Museum of Sparta.

2. Minoan snake goddess figurines

Title	Minoan snake goddess figurines
Kind of object	Object from museum
Place	Heraklion Archaeological Museum, Greece
Date of creation	Late Bronze Age, about 1600 BC
Creator	No reference
Description	The Minoan Goddess of Snake is made of faience with an enamel coating. It's height is 29.5 cm. It depicts a youthful woman, perhaps a goddess standing, holding snakes in her hands. She wears the long skirt made of seven layers made of colourful bands of cloth and an apron. On top, she wears a low-cut front shirt that exposes her bare breasts. On her triangular face there is a head-dress with a sitting panther.
Connection with country, school subjects	The Goddess of Snake is a fine example of Minoan miniature sculpture. This figurine was found together with another larger figurine (perhaps daughter and mother) in Knossos. Today it is housed in the Archaeological Museum of Heraklion. School subjects: History, Arts
Resources	Greek Ministry of Education and Religious Affairs (Greece), (only in Greek language), http://ebooks.edu.gr/ebooks/v/html/8547/2290/Istoria_A-Gymnasiou_html-empl/index_02_04.html , (accessed 07/01/2022). Greek Ministry of Culture and Sports, http://odysseus.culture.gr/h/4/eh430.jsp?obj_id=7884 (accessed 07/01/2022). Khan Academy https://www.khanacademy.org/humanities/ancient-art-civilizations/aegean-art1/minoan/a/snake-goddess , (accessed 07/01/2022).



Photo/os



Minoan Snake Goddess figurines, c. 1600 BCE, Heraklion Archaeological Museum, Crete.



The younger "snake goddess", from the palace of Knossos. Heraklion Archaeological Museum

3.Lion Gate, Mycenae

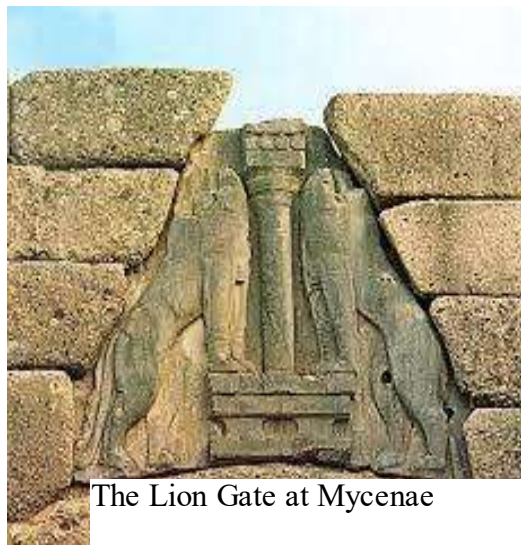
Title	Lion Gate, Mycenae
Kind of object	Historical monument
Place	Argolid, Greece
Date of creation	1250 BC
Creator	No reference
Description	The Lion Gate, this signature monument of the Mycenaean Civilization is the main gate of the citadel at Mycenae. It was built in the north-western side of the Cyclopean Walls that surround acropolis. Four large stones form the Lion Gate. A sculpture that depicts two facing lions separated by a column sits on the triangle of the relief above the gate.
Connection with country, school subjects	The Lion gate is the sole surviving monument of Bronze Age Greece with an iconographic motif. It is considered to be the first example of monumental sculpture we know in Europe. It was mentioned by the ancient geographer Pausanias in the second century AD. School subjects: History, Arts School textbook: History 1st Grade Lower Secondary School
Resources	Ministry of Education and Religious Affairs (Greece), (only in Greek language), http://ebooks.edu.gr/ebooks/v/html/8547/2290/Istoria_A-Gymnasiou_html-empl/index_02_05.html , (accessed 07/01/2022), (only in Greek language). Ministry of Education and Religious Affairs (Greece), (only in Greek language), http://photodentro.edu.gr/aggregator/lo/photodentro-aggregatedcontent-8526-3311 , (accessed 07/01/2022). Ministry of Culture and Sports, http://odysseus.culture.gr/h/3/eh351.jsp?obj_id=2573 , (accessed 07/01/2022).



Photo/os



Archaeological site of Mycenae
Peloponnese: Mycenae. Lion Gate



The Lion Gate at Mycenae



The Lion Gate at Mycenae

4.Lusikrates monument

Title	Lusikrates monument
Kind of object	Historical monument
Place	It is located on the west side of the Street of the Tripods, Athens, Greece
Date of creation	335-334 B.C.
Creator	Unknown
Description	Lysicrates who erected the monument was choregos (literally chorus-leaders) that is a wealthy man who sponsored at his own expense a chorus performance at the theatre of Dionysus (a prominent aspect of Greek drama, a singing and dancing group). The prizes for the victors in the contests for chorus were bronze tripods, that is, a large bronze vessel resting on three legs. Choregoi set up choregic monuments (simple bases, columns, or temple-like structures) in order to display these victory tripods. Lusikrates monument is a choragic circular building that consists of six Corinthian columns of Pentelic marble between panels. Its frieze sculpture depicts the myth of Dionysus. A monolithic roof decorated with carved leaves supports the basis of the choregic tripod.
Connection with my country, school subjects	Lusikrates monument is considered to be the best-preserved sample of an ancient choragic monument in existence. The pentelic marble columns are among the earliest examples of the use of the Corinthian order in Athens (capitals decorated with acanthus leaves and scrolls). School subjects: History, Arts
Resources	Ancient theatre (only in Greek language), http://ancienttheater.culture.gr/el/mouseia-ekthemata-tekmiria/anazitisi-ekthematwn/item/278-xorigiko-mnimeio-lusikrati , (accessed 26/12/2021). Ministry of Culture and Sports. Lindos, http://odysseus.culture.gr/h/2/eh251.jsp?obj_id=891 , (accessed 26/12/2021). Ortiz, Danielle Elizabeth. Tracing a Monument: Creating Spaces. University of California, Irvine, 2019.



Photo/s



Lusikrates Monument

5. Temple of Olympian Zeus, Athens

Title	Temple of Olympian Zeus, Athens
Kind of object	Historical monument
Place	Athens, Greece
Date of creation	561-527 BC
Creator	Antistates, Callaeschrus, Antimachides, Phormos
Description	The temple of Olympian Zeus in Athens (Olympieion or Columns of the Olympian Zeus) is one of the largest in the ancient world and it housed the huge golden and ivory statue of Zeus; It had two rows of 20 columns on the long sides and three rows of eight columns on the narrow sides. Only 16 are now preserved. It was supposed that the temple was built by Deukalion as an exchange for his salvation from the big flood. The geographer Pausanias says that Deukalion's grave was shown nearby. Near the Olympieion there was an opening on the ground and they believed that through this bed the last remains of the great flood had drained after Daucalion had been saved. According to Pausanias every year they cast wheat meal mixed with honey into it.
Connection with my country, school subjects	<p>As the geographer Pausanias mentions the founder of the ancient sanctuary was Deucalion, the mythical ancestor of the Greeks.</p> <p>The tyrant Peisistratus the Young initiated the construction of Olympieion in 515 BC, but the construction remained unfinished as a tyrants' costly prestige project. The Roman Emperor Hadrian completed its construction in 2nd AD century.</p> <p>The temple is located approximately 500 m south-east of the Acropolis, and today it is an open-air museum.</p> <p>School subjects: History, Arts</p>
Resources	<p>Anthony Molho, Kurt Raaflaub, Julia Emlen (Hg.). (1991). City States in Classical Antiquity and Medieval Italy. Athens and Rome, Florence and Venice, Stuttgart, S. 355-380.</p> <p>Ministry of Greek Education and Religious Affairs (only in Greek language), http://ebooks.edu.gr/ebooks/v/html/8547/2290/Istoria_A-Gymnasiou_html-empl/index_04_05.html (accessed 7/1/2022).</p> <p>Ministry of Culture and Sports, http://odysseus.culture.gr/h/2/eh251.jsp?obj_id=500 (accessed 7/1/2022).</p> <p>World History Encyclopedia, https://www.worldhistory.org/article/815/temple-of-olympian-zeus-athens/ (accessed 7/1/2022).</p>



Photo/os



Temple of Olympian Zeus



Temple of Olympian Zeus

6.The ancient Theatre of Asklepios at Epidaurus

Title	The Ancient Theatre of Asklepios at Epidaurus
Kind of object	Historical Monument
Place	Peloponnese, Greece
Date of creation	Circa 4th century BC
Creator	Polykleitos the Younger
Description	<p>The Ancient Theatre of Epidaurus is regarded as the best preserved ancient theatre in Greece in terms of its perfect acoustics and fine structure. It was constructed in the late 4th century BC and it was finalized in two stages. Originally the theatre had 34 rows of seats divided into 34 blocks by stairs and walkways.</p> <p>It is situated near the ancient sanctuary of Asklepios, a celebrated healing center of the classical world. It was used as a therapeutic and religious center dedicated to Asklepios, the god of healing.</p>
Connection with my country, school subjects	<p>The Ancient Theatre of Epidaurus represents the finest and best-preserved example of a classical, ancient, Greek theatre.</p> <p>School subjects: History, Theatre Education</p>
Resources	<p>Greeka, https://www.greeka.com/peloponnese/epidaurus/sightseeing/epidaurus-ancient-theatre/ (accessed 20/12/2021).</p> <p>Greek Travel Pages, https://www.gtp.gr/TDirectoryDetails.asp?ID=80329 (accessed 19/12/2021).</p> <p>Greek Reporter, https://greekreporter.com/2016/09/22/diazoma-unveils-new-plans-to-promote-epidaurus-theater/ (accessed 20/12/2021).</p> <p>The Culture Trip, https://theculturetrip.com/europe/greece/articles/a-very-brief-history-of-epidaurus-ancient-theater-greece/ (accessed on 20/12/2021).</p>



Photo/os



The Ancient Theatre of Asklepios at Epidaurus



The Ancient Theatre of Asklepios at Epidaurus



The Ancient Theatre of Asklepios at Epidaurus

7. The Palace of Knossos

Title	Palace of Knossos
Kind of object	Historical Monument
Place	Crete, Greece
Date of creation	Old Palace circa 2000 BC New Palace circa 1700 BC
Creator	Unknown
Description	The Palace of Knossos is the largest and most spectacular of all the Minoan palatial centers. It had four wings arranged around a rectangular, central court, oriented North-South, which was actually the nucleus of the whole complex. The palace had many storeys, it was built of ashlar blocks and its walls were decorated with splendid frescoes. The old (first) palace was built in around 2000 BC but it was completely destroyed by an earthquake in 1700 BC. The new palace, more complex in plan, strongly resembling a labyrinth, was constructed immediately afterwards.
Connection with my country, school subjects	The Palace of Knossos is the heart of the Minoan Civilization. School subjects: History, Theatre Education
Resources	Crete Guide, http://www.crete-guide.info/knossos.htm (accessed 10/12/2021). Greek Travel Pages , https://www.gtp.gr/TDirectoryDetails.asp?ID=14729 (accessed 10/12/2021). Municipality of Heraklion, https://www.heraklion.gr/en/ourplace/knossos/knossos.html (accessed 10/12/2021). Lonely Planet, https://www.lonelyplanet.com/greece/crete/knossos/attractions/palace-of-knossos/a/poi-sig/504778/359431 (accessed on 10/12/2021).



Photo/os



Graphik representation of Knossos Palace





The Dolphin room at the Palace, Knossos



The Palas of Knossos

8. Taurokathapsia (Bull-Leaping Fresco)

Title	Taurokathapsia (Bull-Leaping Fresco)
Kind of object	Object from a museum
Place	Heraclion Archaeological Museum, Heraclion, Crete
Date of creation	Circa 1500-1400 BC
Creator	Unknown
Description	The Bull-Leaping Fresco is the most completely restored of several stucco panels originally sited on the upper-story portion of the east wall at the Great Palace at Knossos in Crete. Overall, the fresco's dimensions are 78,2 cm by 104,6 cm. The fresco depicts a male youth executing a flip over a charging bull, while two young women appear to flank him from the front and the rear.
Connection with my country, school subjects	Fragments of the fresco were unearthed by British archaeologist Arthur Evans during his excavations at Knossos, Crete. He recognised that the bull-handling tradition was represented in other sites on Crete, as well as the Aegean and mainland Greece. The bull played an important role in Minoan culture and is closely associated with Knossos. School Subjects: History, Arts
Resources	Ancient World Magazine, https://www.ancientworldmagazine.com/articles/jumping-bull-leaping-fresco-knossos/ (accessed 01/10/2021). Heraklion Archaeological Museum, https://heraklionmuseum.gr (accessed 02/10/2021). Khan Academy, https://www.khanacademy.org (accessed on 02/10/202). National Geographic, https://nationalgeographic.org/media/bull-leaping/ (accessed 01/10/2021).
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Taurokathapsia (details)

Taurokathapsia (general view)




Stamp depicting Bull-Leaping

Taurokathapsia (details)



Seal Ring depicting Bull-Leaping

9. The Gold Larnax of King Philip II

Title	The Gold Larnax of King Philip II
Kind of object	Object from museum
Place	The Museum of the Royal Tombs at Aigai
Date of creation	336 BC
Creator	Unknown (goldsmith)
Description	The Gold Larnax (coffin) was found in the unlooted tomb of Greek King Philip II in Vergina, Macedonia, North Greece. It contained the assassinated king's bones and the oak crown worn by the dead man. The Gold Larnax is made of 7,820 gr. of hammered pure gold. Its lid is decorated with a 16 - rayed star symbol (Sun of Vergina) and two rosettes, the inner of which is filled with blue enamel. The feet are decorated with rosettes and end in lion-paws.
Connection with my country, school subjects	It was found in the tomb of Greek King Philip II, father of Alexander the Great, and bears the Pan-Hellenic symbol of the Sun of Vergina which was widely used in the Kingdom of Macedon. School Subjects: History
Resources	Discover Greece, https://www.discovergreece.com/el/macedonia/vergina (accessed 16/12/2021). Ministry of Culture and Sports, http://odysseus.culture.gr/h/4/gh430.jsp?obj_id=14050 (accessed 15/12/2021). Ministry of Culture and Sports, http://odysseus.culture.gr/h/1/eh151.jsp?obj_id=3297 (accessed 15/12/2021). School Subjects: Ancient History
Photo/os	



The wreath and the Gold Larnax of King Philip II



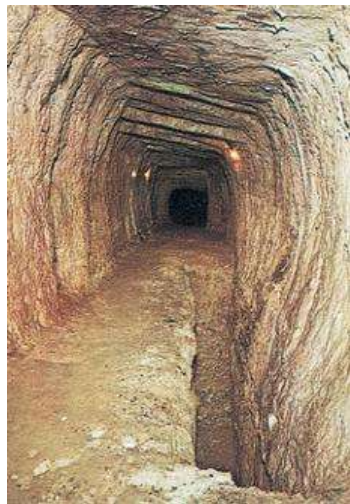
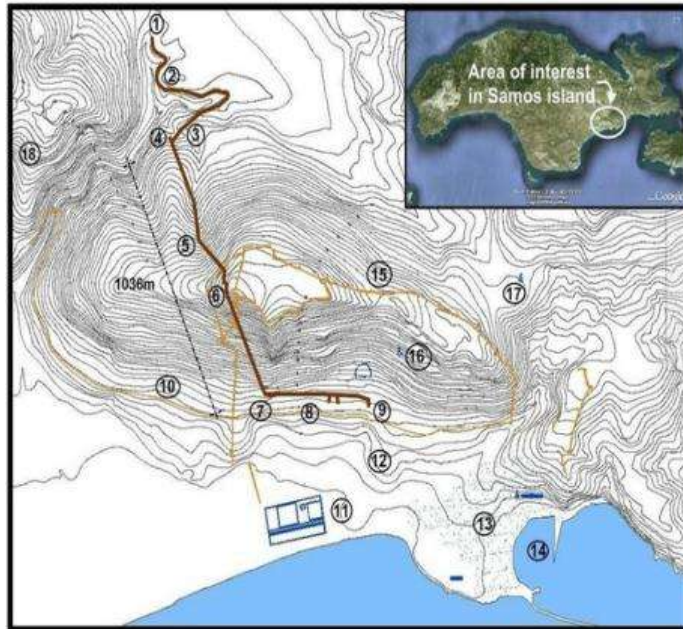
The Gold Larnax of King Philip II

10.The Eupalinos Aqueduct/Tunnel in Samos

Title	The Eupalinos Aqueduct/Tunnel in Samos
Type of object	Historical Monument
Place	Samos Island, Greece
Date of creation	circa 550-540 BC
Creator	Eupalinos (architect)
Description	The Eupalinos Aqueduct/Tunnel is considered as one of the most important engineering accomplishments of antiquity. It's a 1036m long tunnel in Samos Island, Greece, built around 550 BC to serve as an aqueduct and therefore supply fresh water to the city of Samos (Pythagoreion). The Engineer Eupalinos built a tunnel under a mountain by starting to dig, concurrently, from two sites diametrically opposite. All applied measurements using maths and geometry are of exceptional precision.
Connection with my country, school subjects	The Eupalinos Aqueduct/Tunnel is a Greek engineering feat of outstanding importance since it was the first time in the history of mankind that anyone had attempted to execute a project of that greatness with no similar reference. School subjects: History
Resources	Greek Ministry of Culture & Sports, http://odysseus.culture.gr (accessed on 27/11/2021). Greek Tunnelling Society, https://www.eupalinos-tunnel.gr/ (accessed 27/11/2021). Odysseus, http://odysseus.culture.gr/h/2/eh251.jsp?obj_id=818 (accessed 27/11/2021). Samos Island Explorer, https://www.samosin.gr/el/item/%CE%B5%CF%85%CF%80%CE%B1%CE%BB%CE%AF%CE%BD%CE%B5%CE%B9%CE%BF-%CF%8C%CF%81%CF%85%CE%B3%CE%BC%CE%B1/ (accessed 27/11/2021).



Photo/os



The Eupalinos Aqueduct/Tunnel in Samos



11. The Hermes and the infant Dionysus

Title	Hermes carrying the infant Dionysus (also known as Hermes of Praxiteles or Hermes of Olympia)
Kind of object	Object from museum
Place	Archaeological Museum of Olympia, Greece
Date of creation	circa 340- 330 BC
Creator	Praxiteles, an Athenian sculptor (4 th cen. BC)
Description	The marble complex [2.13m high] depicts Hermes holding little Dionysus on his left arm. Hermes is represented as a young man without a beard, who stands on his right leg and leans against a tree trunk on his left, bending backwards and touching the ground only with the toes of his left foot. In his missing right hand, Hermes was probably holding a bunch of grapes, a symbol of Dionysus, which he showed to the little god.
Connection with country, school subjects	<p>German excavators discovered the complex in the Temple of Hera at Olympia on April 26/ May 8, 1877, several metres below the ground. It was found where Pausanias, the traveller, actually saw it around 175 AC.</p> <p>Although nowadays archaeologists have decided beyond doubt that it is an original Greek classical work, the earliest years of its discovery, they debated whether it was original, if it had been reworked in the late Hellenistic years or if it was a Roman copy.</p> <p>School subjects: History, Arts</p>
Resources	<p>Greek Ministry of Sports and Culture, Hermes of Praxiteles (Only in Greek), http://odysseus.culture.gr/h/4/gh430.jsp?obj_id=8898 (accessed 02/10/2021).</p> <p>Oscar Antonsson, The Praxiteles Marble Group in Olympia, http://assets.cambridge.org/9781107662971/frontmatter/9781107662971_frontmatter.pdf (accessed 02/10/2021).</p> <p>University of Missouri, museum of Art and Archaeology, Hermes and the Infant Dionysus https://maa.missouri.edu/gallery/hermes-and-infant-dionysos (accessed 02/10/2021).</p>



Photo/os



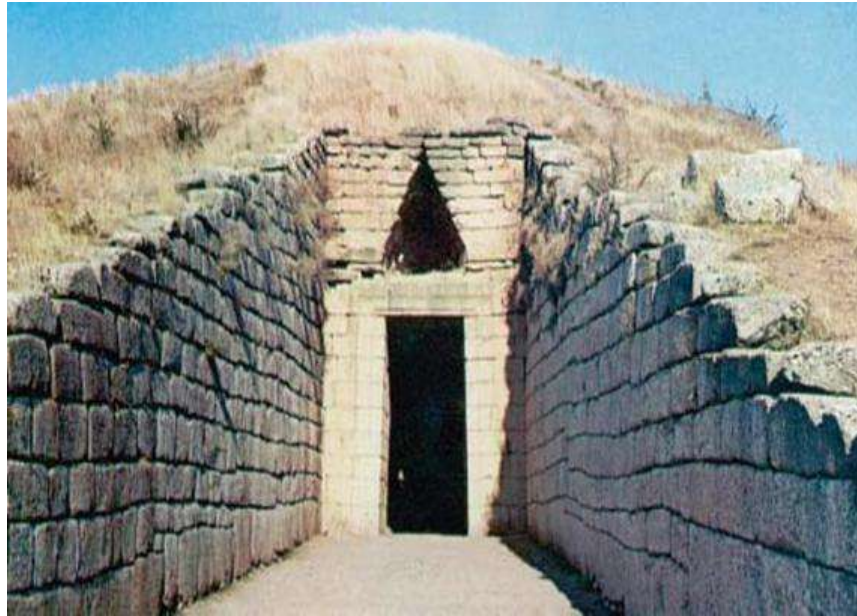
The Hermes and the infant Dionysus

12. The treasure of Atreus

Title	Treasure of Atreus
Kind of object	Historical monument
Place	Mycenae, Greece
Date of creation	circa between 1350- 1250 BC and remained in use for a long but not precisely defined period.
Creator	Unknown
Description	A long stomion (corridor, 5.40 m. long), which was blocked by accumulated small stones, leads towards the entrance of the tomb. The facade (10.50 x 6 m.) used to be richly ornamented. The entrance had a wooden double door set. The lintel is made of two enormous granite slabs (the inner measuring 8 x 5 x 1.50 m., 120 tons heavy). The tholos or round chamber is made of thirty-three superposed rings of conglomerate ashlar stones and it is roofed with a conical vault, looking like a beehive. There is, also, a side-chamber hewn in the rock. The whole construction was covered with a mound.
Connection with my country, school subjects	The vaulted tomb of Atreos, also known as the "treasure of Atreus" or the "tomb of Agamemnon" is the most impressive of the Mycenaean tholos tombs. It dominated southwest of the citadel of Mycenae, on the road that connected Mycenae with the Heraion of Argos. It was used for the burial of an important member of the royal family of Mycenae. As early as the time of the traveler Pausanias (2nd century AD), the inhabitants of the area knew the monument as a "treasure", ie as a treasury of the founder of the mythical Mycenaean citadel, Atreus. School subjects: History, Arts
Resources	Encyclopædia Britannica, https://www.britannica.com/topic/Treasury-of-Atreus . (accessed 19/12/2021). Greek Ministry of Culture and Sports, Mycenae, treasure of Atreus, http://odysseus.culture.gr/h/2/eh251.jsp?obj_id=819 (accessed 19/12/2021).



Photo/os



History

School

textbook

http://ebooks.edu.gr/ebooks/v/html/8547/1999/Istoria_G-Dimotikou_html-empl/images/img10_25.jpg

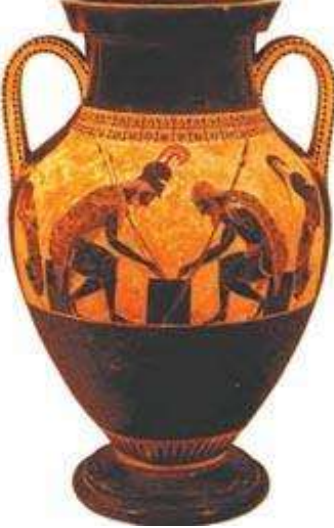



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13. Amphora with Ajax and Achilles playing a game

Title	Amphora with Ajax and Achilles playing a game (the black-figure technique in pottery)
Kind of object	Object from museum
Place	Museo Gregoriano Etrusco, Musei Vaticani, Vatican (344)
Date	540-520 BC
Creator	Exekias, Athenian potter and painter of the 2 nd half of the 6 th century BC
Description	This amphora [0,61m] has an ovoid body, a not very tall cylindrical neck, and big handles from the neck to the shoulder. The amphora is covered with black varnish and few bands of geometric patterns and it has two wide rectangular light-coloured panels. The “front” one is decorated with the two heroes, Achilles and Aias, playing a board game on the sidelines of the Trojan war. They sit facing each other, armed but they have left a helmet and a shield by their side. Absorbed by the game, they call out their score at the dice (four/ three). The “back” panel shows the return of the Dioskouroi to their parental home with their parents welcoming them.
Connection with my country, school subjects	<p>The amphora was discovered at Vulci, Italy, in 1834 and has an inscription: “HEXΣEKIAS EΠOIEΣEN” [i.e. Exekias made it/ me] revealing its creator. Exekias is one of the greatest Greek vessels painters of the second half of the 6th century BC., who must have owned a pottery workshop. He is one of the craftsmen who leads the black-figure rhythm in pottery to the peak of its development. This technique presents the figures in black on a light-coloured background. The black colour is a varnish, put on the pot before baking, which becomes black during baking. The most interesting innovation of this technique is that craftsmen started engraving lines, which enabled them to add more details in their drawings. From Exekias’s workshop probably there came the inventor of the red- figure rhythm, the second in row technique used for decorating vessels.</p> <p>School subject: History, Art, Ancient Greek Literature</p>
Resources	<p>Khan Academy: Exekias, amphora with Ajax and Achilles playing a game, https://www.khanacademy.org/humanities/ancient-art-civilizations/greek-art/greek-pottery/v/exekias-attic-black-figure-amphora-with-ajax-and-achilles-playing-a-game?modal=1 (accessed 29/12/2021).</p> <p>National Archaeological Museum, https://www.namuseum.gr/en/collection/archaiiki-periodos-2/ (accessed 29/12/2021).</p> <p>Psifides for the greek language: the peak of the black figure technique: “the painter of Amasis” and Exekias (Only in Greek language), https://www.greek-language.gr/digitalResources/ancient_greek/history/art/page_038.html</p>



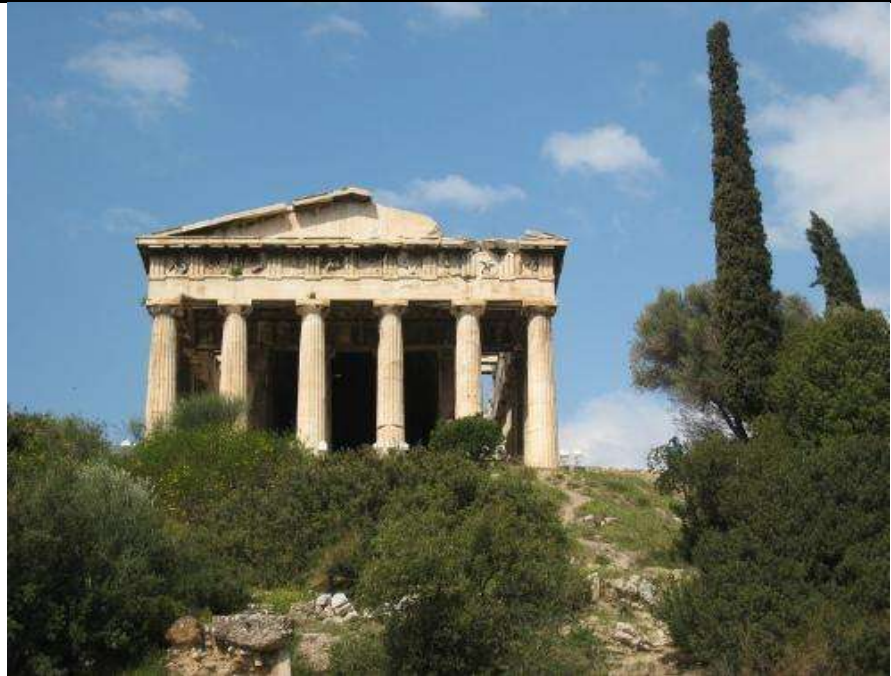
	<p>(accessed 29/12/2021).</p> <p>The beginning of the red figure technique (Only in Greek language), https://www.greek-language.gr/digitalResources/ancient_greek/history/art/page_057.html (accessed 29/12/2021).</p>
<p>Photo/os</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>The amphora</p> </div> <div style="text-align: center;">  <p>A red-figured amphora</p> </div> </div>

14. Temple of Hephaestus and Athena, known as Theseum

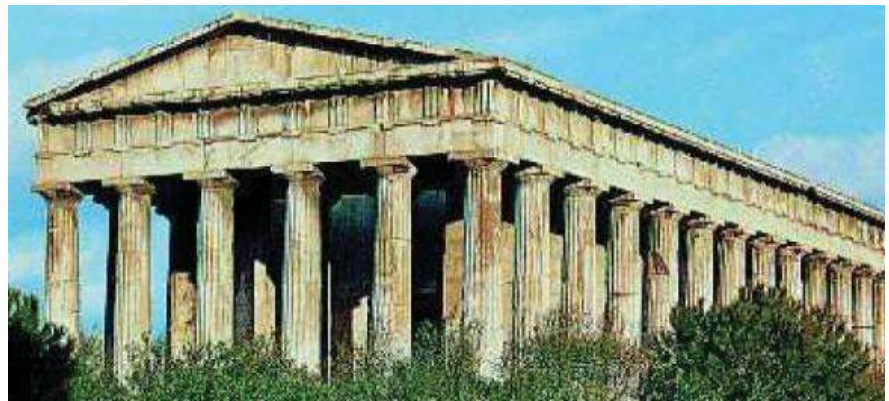
Title	Temple of Hephaestus and Athena, known as Theseum
Kind of object	Historical monument
Place	Athens, Greece
Date of creation	ca. 460 BC.- 420 BC.
Creator	Unknown architect
Description	The Theseum is a Doric temple made of marble from Penteli, a mountain in Attiki. It is the best-preserved ancient Greek temple in the world, but is far less well-known than its illustrious neighbour, the Parthenon. On the exterior it was surrounded by a Doric colonnade [which means it is a peripteral temple] having six columns along the narrow sides and thirteen columns along the longer sides. The east side of the metopes depicted nine of the feats of Hercules, while on the north and the south side there are depicted four of the feats of Theseus.
Connection with country, school subjects	The temple is located about 500m north-west of the Acropolis of Athens, a district which contained many foundries and metalwork shops. It was, therefore, dedicated to Hephaestus and Athena as patrons of the arts and crafts. But as some of its sculptures represent the exploits of the hero Theseus, it has been known as the “Theseum” since the Middle Ages. In the seventh century AD, the temple was converted into a church dedicated to St. George Akamatis, and thus stayed in use until the liberation of Greece from the Ottoman occupation. School subjects: History, Arts, Religious Education
Resources	Hellenica world, Greek Temples Hephaestus Temple of Athens (Theisio), http://www.hellenicaworld.com/Greece/Architecture/en/HephaestusAthens.html (accessed 21/12/2021). Britannica, Theseum, Theseum temple, Athens, Greece Britannica , (accessed 21/12/2021). Ministry of Sports and Culture, Temple of Hephaestus: http://odysseus.culture.gr/h/2/eh251.jsp?obj_id=6621 (accessed 21/12/2021).



Photo/os



Temple of Hephaestus and Athena



Temple of Hephaestus and Athena



15.Kore Frasiikleia and Kouros

Title	Kore Frasiikleia and Kouros (a presentation of the archaic type of statues: Kore and Kouros)
Kind of object	Object from museum
Place	National Archaeological Museum, Athens
Date of creation	Archaic Period, 540 BC
Creator	Aristion, a Parian sculptor
Description	It is the funerary statue of an Archaic "kore", a young unmarried girl, with a slim and youthful figure. Her name - inscribed on the pedestal- is Phrasikleia. She stands frontally, dressed in a long chiton. She draws the right side of the chiton up with her right hand, while she holds a lotus bud near her chest with her left hand. A blossoming wreath adorns her intricate hairdo and jewelery decorates her head and arms. The statue was discovered buried along with the so -called "kouros of Merenda"
Connection with my country, school subjects	The "Kouros" and the "Kore" are the dominant types of statues we find in Greece during the archaic period (ie from the end of the 7th to the beginning of the 5th century BC). The term "Kouroi" refers to standing statues of young men, mostly naked, while the term "Korai" refers to standing statues of young unmarried girls or women, who are always dressed in luxurious clothes with colourful decoration motifs and wearing jewels. Common elements in both types of statues are youth, elaborate headdress, beauty and wealth School subjects: History, Arts
Resources	<p>Greek Ministry of Sports and Culture, Frasiikleia, http://odysseus.culture.gr/h/4/eh430.jsp?obj_id=5441, (accessed 26/12/2021).</p> <p>Lady of Auxerre, https://www.khanacademy.org/humanities/ancient-art-civilizations/greek-art/daedalic-archaic/v/lady-auxerre?modal=1 (accessed 26/12/2021).</p> <p>Marble statue of a kouros, https://www.khanacademy.org/humanities/ancient-art-civilizations/greek-art/daedalic-archaic/v/naked-authority?modal=1 (accessed 26/12/2021).</p> <p>National Archaeological Museum, https://www.namuseum.gr/en/collection/archaiiki-periodos/, (accessed 26/12/2021).</p> <p>The portal for the Greek Language, Psifides, The monumental plastic art and the use of marble, https://www.greek-language.gr/digitalResources/ancient_greek/history/art/page_043.html?p_rev=true (only in Greek) (accessed 26/12/2021).</p>



Photo/os



Left: Kouros of Merenda

Right: Kore Frasiikleia

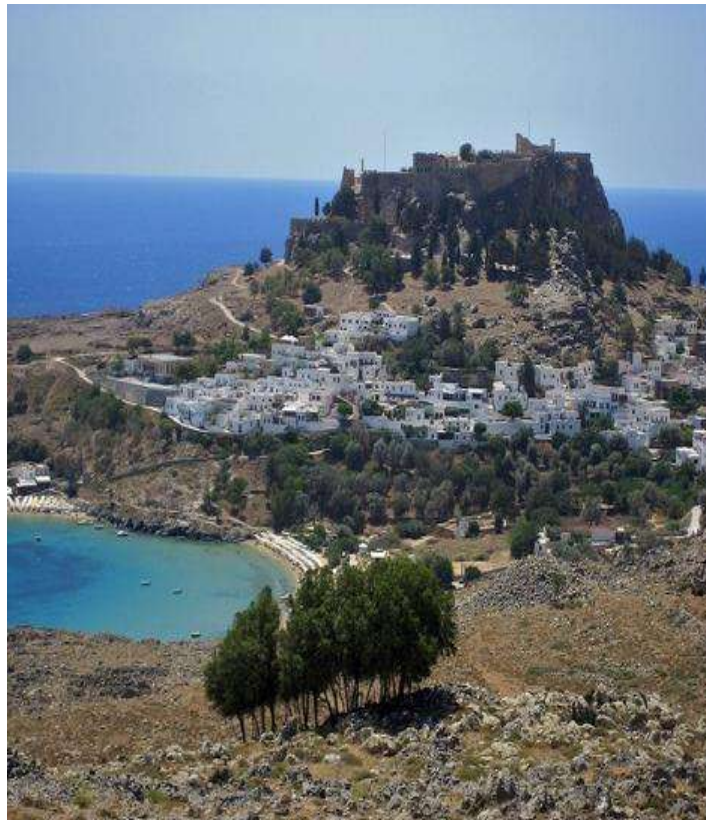
16. The Acropolis of Lindos

Title	The Acropolis (citadel) of Lindos
Kind of object	Archaeological site
Place	Lindos, Rhodes island, Dodecanese, Greece
Date of creation	There are some indications that connect the citadel of Lindos with the Mycenaean and Geometric era. The city flourished during the Archaic era (7th - 6th century BC).
Creator	Unknown
Description	The Acropolis (citadel) of Lindos is located on a rocky outcrop above the ancient city of Lindos. On the citadel of Lindos the most important monument is the remains of the doric temple of Athena Lindia. The ruler of Lindos, Cleovulus, one of the seven sages of Greek antiquity, built the archaic temple in the 6th century B.C.. At the entrance of the Acropolis, there is the relief representation of a trihemiolia, (a type of warship). This work was sculpted by the famous sculptor Pythocritus, creator of the Victory of Samothrace.
Connection with my country, school subjects	Lindos was one of the most important ancient Greek cities in Rhodes island and South East Aegean sea. Lindos participates in the colonial spread of the Greeks. Lindos, Ialissos, Kameiros in Rhodes island, Cos in Cos island, Alikarnassos and Knidos in Asia Minor constituted the Doric Hexapolis. School subjects: History, Arts
Resources	E.M.I. Holy Metropolis of Rhodes, The trihemiolia, http://www.lindosmuseum.gr/index.php?option=com_content&view=article&id=63979&Itemid=31223&lang=en , (accessed 26/12/2021). Greek Ministry of Culture and Sports. Lindos, http://odysseus.culture.gr/h/3/gh351.jsp?obj_id=2383 , (accessed 26/12/2021). Higbie Carolyn The Lindian Chronicle and the Greek Creation of Their Past, Oxford University Press, 2003.

Photo/os



Lindos, details



Lindos, general view

17. The Dipylon Amphora

Title	The Dipylon Amphora
Kind of object	Object from museum
Place	National Archaeological Museum, Athens
Date of creation	Late Geometric Period/ Early Archaic Period, 760 B.C. - 750 B.C.
Creator	The so called “ the painter of Dipylon”
Description	This is an intact funerary amphora [1,6m height], an exceptional sample of greek geometric pottery. It has an ovoid body, tall cylindrical neck and small handles high on the shoulder. The base has a hole for libations in honour of the dead. The amphora is entirely covered with horizontal bands of geometric decorative motifs, mainly meanders in different variants, lines and stylised animals and birds. A rectangular panel at handles height shows a funerary scene, the “prothesis”: the deceased is placed with a shroud on a bier surrounded by mourners with their arms raised.
Connection with my country, school subjects	The unknown creator was conventionally named after this vase. The amphora was discovered in the cemetery of Dipylon, in Kerameikos. School subjects: Ancient Greek Literature, Arts, History
Resources	Khan Academy Dipylon amphora, https://www.khanacademy.org/humanities/ancient-art-civilizations/greek-art/greek-pottery/v/dipylon-vase?modal=1 (accessed 26/12/2021). National Archaeological Museum, Geometric Period, https://www.namuseum.gr/en/collection/geometriki-periodos-3/ (accessed 26/12/2021). Odysseus, Ministry of Culture and Sports, The Dipylon amphora, http://odysseus.culture.gr/h/4/eh430.jsp?obj_id=5161 (accessed 26/12/2021).

Photo/os



The Dipylon Amphora, National Archaeological Museum,

https://www.namuseum.gr/wp-content/uploads/2018/10/804_lightbox.jpg

18. The Asklepieion at Kos

Title	Asklepieion at Kos
Kind of object	Archaeological site
Place	Kos island, Greece
Date of creation	The earliest use of the site dates back to the Mycenaean and geometric eras. The sanctuary flourished in Hellenistic and Roman times and gained pan-Hellenic fame, after 242 BC.
Creator	Unknown
Description	It was a healing centre of the ancient world dedicated to god Asklepios, the son of god Apollon. Until the Hellenistic times patients after a procedure with rest, diet, baths, visits to the gymnasium and sacrificing received the traditional treatment, based on the miraculous intervention of the god, who appeared in the patients' dreams and indicated their treatment. Later it seems that there were professional doctors who used scientific methods and surgical instruments to cure the diseases. Scientific medicine was especially developed in the Asklepieion of Kos, thanks to the medicine school founded on the island by Hippocrates, the father of Medicine.
Connection with my country, school subjects	The sanctuary was one of the most important Asklepieia (healing centres) of antiquity in Greece. It was flourished during the Hellenistic and Roman period, especially after 242 BC, when the Kos island gained truce, the protection of the sanctuary from war or other hostile actions, and the Great Asclepieia feast was established, every five years, with music competitions and naked races, in which all Greek cities participated. School subjects: History
Resources	Askitopoulou, Helen., Konsolaki, Eleni, Ioanna A Ramoutsaki, Ioanna A., Anastassaki, Maria. (2002). Surgical cures under sleep induction in the Asclepieion of Epidaurus. 1242 (none), 0–17. doi:10.1016/s0531-5131(02)00717-3 (assessed on 26/12/2021). Christopoulou-Aletra, H., Togia, A., Varlami, C. The “smart” Asclepieion: A total healing environment, Archives of Hellenic Medicine 2010, 27(2):259-263 http://mednet.gr/archives/2010-2/pdf/259.pdf (assessed on 26/12/2021). Greek Ministry of Culture and Sports, http://odysseus.culture.gr/h/3/eh351.jsp?obj_id=2395 (assessed 26/12/2021). Kanellou V. (2004). Ancient Greek medicine as the foundation of



contemporary medicine. 8(1 Supplement), s3–s4. doi:10.1007/s10151-004-0095-z (assessed 26/12/2021).

Photo/os



Asklepieion at Kos



"File:Asklepieion (Kos) 11.jpg" by Michael Schmalenstroer is licensed under CC BY-SA 4.0



"File:Asklepieion (Kos) 18.jpg" by Michael Schmalenstroer is licensed under CC BY-SA 4.0

19. The Tholos/Thymele at the Sanctuary of Asklepios at Epidaurus

Title	Tholos/ Thymele at the Sanctuary of Asklepios at Epidaurus
Kind of object	Historical monument
Place	Epidaurus, Greece
Date of creation	Between 365 - 335 B.C.
Creator	Polykleitos from Argos was the architect of Tholos
Description	Tholos was a circular peristyle structure, part of the complex of the Asclepieion at Epidaurus. Outside of the wall there was a colonnade of 26 Doric columns. Inside there was a circular colonnade of 14 Corinthian columns. The floor was impressive, with rhomboidal black and white marble tiles. The most enigmatic part of the structure is the basement. In the basement three concentric walls form corridors with passages like labyrinth. Tholos was housing Asclepios a chthonian god who healed his suppliants under the earth.
Connection with my country, school subjects	Tholos at the Sanctuary of Asklepios at Epidaurus is considered the most perfect circular structure of ancient Greek architecture. It is part of the Asclepieion at Epidaurus, the largest healing centre in the ancient world. Schools Subjects: History, Art, Ancient Greek Literature
Resources	Argoliki Vivliothiki, https://argolikivivliothiki.gr/2009/02/28/%ce%b8%cf%8c%ce%bb%ce%bf%cf%82-%ce%b8%cf%85%ce%bc%ce%ad%ce%bb%ce%b7-%ce%b1%cf%83%ce%ba%ce%bb%ce%b7%cf%80%ce%b9%ce%b5%ce%af%ce%bf%cf%85-%ce%b5%cf%80%ce%b9%ce%b4%ce%b1%cf%8d%cf%81%ce%bf%cf%85/ (accessed 26/12/2021). GB Risse, M Long - unpublished Lecture, May, 2008 - researchgate.net https://www.researchgate.net/profile/Guenter-Risse/publication/273440826_Asclepius_at_Epidaurus_The_Divine_Power_of_Healing/links/5500b2a40cf2aee14b574038/Asclepius-at-Epidaurus-The-Divine-Power-of-Healing.pdf (accessed 26/12/2021). Greek Ministry of Culture and Sports (Only in Greek language), http://odysseus.culture.gr/h/2/gh251.jsp?obj_id=14321 (accessed 26/12/2021). Robinson, Alice M. "The Cult of Asklepius and the Theatre." <i>Educational Theatre Journal</i> 30, no. 4 (1978): 530–42. https://doi.org/10.2307/3206048 .



Photo/os



The Tholos



The Tholos

20. The Winged Victory of Samothrace

Title	Winged Victory of Samothrace (Nike of Samothrace)
Kind of object	Object from museum
Place	Louvre Museum, Paris, France
Date of creation	circa 220–190 BC
Creator	Pythokritos of Rhodes
Description	<p>The statue, made of white Paros marble, stands 3,28 m tall. The base and the pedestal are sculpted from grey white-veined marble from Rhodes.</p> <p>The winged female represents the goddess of Victory (Nike in Greek language) about to land on a ship and bring the message of a seawar victory. The winners, perhaps the inhabitants of the island of Rhodes, erected the statue of victory in Samothrace to thank the Great Gods of Samothrace island, the Cabeiri, who were promoters of fertility and protectors of sailors.</p>
Connection with my country, school subjects	<p>The Winged Victory of Samothrace is a masterpiece of Hellenistic Art. The statue was discovered in Samothrace, a Greek island in the northern Aegean Sea, in 1863 by the French by the amateur archeologist and then French vice-consul to Adrianopolis, Charles Champoiseau, who sent it to Paris in the same year. It represents the Greek goddess of Victory and was erected for the sanctuary of Great Gods of Samothrace, the Cabeiri.</p> <p>School subjects: History, Arts</p>
Resources	<p>Khan Academy, https://www.khanacademy.org/humanities/ap-art-history/ancient-mediterranean-ap/greece-etruria-rome/v/nike-winged-victory-of-samothrace-c-190-b-c-e (assessed 22/8/2021).</p> <p>Louvre Museum (Only in French language), https://focus.louvre.fr/en/winged-victory-samothrace (assessed 22/8/2021).</p> <p>Louvre Museum, https://www.louvre.fr/en/explore/the-palace/a-stairway-to-victory (assessed 22/8/2021).</p> <p>Pruski, Sarah. 2019. Prowess and Protection: A Cultic Analysis of the “Winged Victory of Samothrace” in Ancient Greece. Master’s thesis, Harvard Extension School.</p> <p>Stewart, Andrew (2016). The Nike of Samothrace: Another View. American Journal of Archaeology, 120(3), 399. doi:10.3764/aja.120.3.0399.</p>

Photo/os



The Winged Victory of Samothrace (Nike of Samothrace)

21. The Parthenon

Title	Parthenon, Acropolis
Kind of object	Historical monument
Place	Greece, Athens
Date of creation	447-438 BC
Creator	The architects: Ictinus and Kallikrates. The sculptor: Pheidias
Description	The Parthenon, a temple dedicated to Athena Parthenos - protector of the city- is the most brilliant creation of the Athenian democracy. It is a temple of Doric style with many Ionian elements, a fact that testifies to the high aesthetic and spiritual culture of the Athenian society of the 5th c. AD. Its rich sculptural decoration narrates myths and public events of the city of Athens, but also myths that are widespread in the Greek world. It is made of white marble, on which the light of the Attic sky is reflected, giving the building a supernatural glow. In 1987 the monument was included in the UNESCO World Heritage List.
Connection with my country, school subjects	The Parthenon has been described as a "miracle" of architectural composition and clarity, an international symbol of Classical Greece, which has been a model of inspiration and evaluation of art for many centuries. This characterization is due on the one hand to the harmony of the proportions - the rule of the Golden Section is found everywhere - and on the other hand to the "visual corrections" applied by its architects. The Parthenon, the most perfect in proportions and harmonization with the environment building of world architecture, expresses in the most perfect way the aesthetic ideal of the "classical spirit". Unfortunately, much of the decorative sculpture, in the early 19th century, was forcibly detached and transported to Great Britain, where it is now on display in the British Museum. The return of the "Parthenon marbles" to the land that created them is now a demand of the world community, not only of the Greek people. School Subjects: History, Art, Greek Ancient Literature
Resources	Ancient Athens 3D (3D presentation of Parthenon), https://www.youtube.com/watch?v=PWPCZ1UjYml (accessed 07/12/21). Documentary, "The Parthenon's secrets"), https://www.youtube.com/watch?v=6XMdZ7avKD4&t=13s , (accessed 07/12/21). Greek Ministry of Culture and Sports, "Parthenon" a film by C. Gavras,



<https://www.youtube.com/watch?v=DbkqtsHGDJc>, (accessed 07/12/21).

Neils J. (2005), *The Parthenon, from antiquity to the present*, Cambridge University Press.

The Parthenon Gallery at the Acropolis Museum
<https://www.theacropolismuseum.gr/ekthesiakoi-horo/i-aithoysa-toy-parthenona> (accessed 07/12/21).

Photo/os




The Parthenon, view from the west side



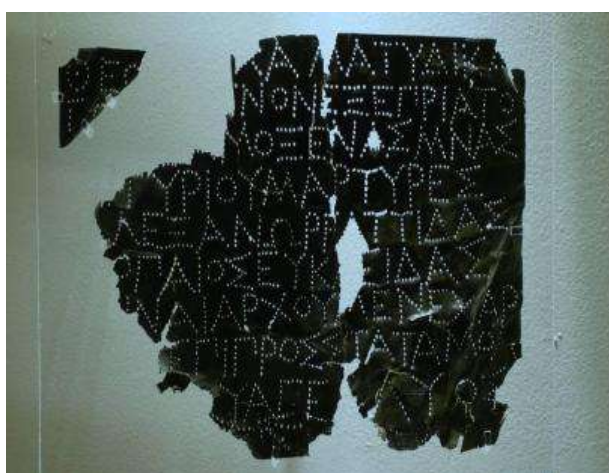
Acropolis, dominated by the Parthenon

22. The Oracle (Sanctuary) of Dodona

Title	Oracle (Sanctuary) of Dodona
Kind of object	Archaeological site
Place	Europe/Greece/Region of Epirus /Ioannina/Dodona
Date of creation	Bronze Age / 4th c. BC
Creator	Unknown / According to myth: two black doves that flew from Thebes, Egypt.
Description	Initially the sanctuary was associated with the worship of the Goddess Gaia. Later the worship of Zeus and his wife Dionis prevailed. In its first period, the sanctuary was open-air, while most of the buildings, such as the theater, the boulevard (vouleftirion), the rectory and the stadium, seem to have been built during the reign of Pyrrhus (3rd century BC). The sanctuary also functioned as an oracle from an early age. Its priests, known as Selli or Helli, used to give oracles to the faithful, sometimes interpreting the rustling of the leaves of the sacred oak tree and sometimes the flying of the birds that nested in it.
Connection with my country, school subjects	According to Aristotle ("Meteorologically"), the area of Dodona was the cradle of the Greeks (Hellens), as it is identified with the place of origin of the mythical hero Helleen, ancestor of the Greeks and son of Deucalion. The association of the Helleen with Dodona is made through the first inhabitants of the area, the Selli or the Helli. Later this name was given to the priests of Dodonaiois Zeus, the dominant God in the oracle. School Subjects: History, Geography
Resources	«Acoustic Tour in ancient Dodona», https://www.youtube.com/watch?v=FN53DLa5mxk (accessed 01/12/21). The Acropolis Museum in Athens, temporary exhibition "Dodona: the oracle of sounds", 2016-2017, https://www.youtube.com/watch?v=vDneuZCFwus (accessed 01/12/21).
Photo/os	 <p style="text-align: center;">Dodona Oracle, The holy oak tree</p>



Dodona Oracle, The theatre



Dodona Oracle, bronze laminate

23. Monastic complex of Meteora

Title	Monastic complex of Meteora
Kind of object	Religious monument
Place	Greece, Region of Thessalia, Kalambaka city, Meteora
Date of creation	11 th – 15 th century AD
Creator	Monks who consecrated in the area from the 11th to the 16th century.
Description	In an area of about 30 kilometers there are unique sandstone rocks - up to 400 meters high - which compose a unique geological phenomenon. This particular location was chosen for asceticism by Orthodox monks of the 11th century. AD, gradually founding almost 30 monasteries. In several of them there are magnificent frescoes of the 15th and 16th c., a brilliant example of post-Byzantine monumental painting in Greece. Today 6 of these monasteries are preserved and can be visited. The area has been included in the UNESCO World Heritage List since 1988.
Connection with my country, school subjects	Meteora is still the second largest and most important monastic community in the Greek Orthodox area after Mount Athos. The continuous same use of the space from the 11th c. and further maintains the religious tradition in the area. At the same time, the preservation, study and publication of the monasteries' frescoes offered on the one hand to the scientific community great samples of post-Byzantine monumental painting and on the other hand to the visitors the opportunity for its aesthetic enjoyment. School Subject: History, Geography, Religious Education
Resources	Greek Ministry of Culture and Sports, http://odysseus.culture.gr/h/3/gh351.jsp?obj_id=2442 (accessed 30/11/21). Sister Daniilia, Elpida Minopoulou, Konstantinos S. Andrikopoulos, Andreas Tsakalof, Kyriaki Bairachtari, (2008), From Byzantine to post-Byzantine art: the painting technique of St Stephen's wall paintings at Meteora, Greece, <i>Journal of Archaeological Science</i> , Vol. 35, Issue 9, p. 2474-2485. UNESCO Greece, https://whc.unesco.org/en/list/455/ (accessed 30/11/21).



Photo/os



Meteora, overview



Meteora, Monastery of Hypapanti




Meteora, Monastery of of Grate



Meteora, Monastery of St. Nicolas

24. The Triumph arch of Galerius, Thessaloniki

Title	Triumph arch of Galerius, Thessaloniki
Kind of object	Historical monument
Place	Greece, Region of Thessaloniki, Thessaloniki city
Date of creation	Circa 305 AD
Creator	The architect is unknown. It was probably built to order by Caesar Galerius
Description	The Triumphal Arch of Galerius was built in Thessaloniki after its final victory over the Persians at the beginning of the 4th c. BC. In its original form it was an structure with 8 gates and equal number of arches and a low spherical dome as a crown. It was part of the brilliant building complex of the city and was connected with both the Rotunda and the palaces of Caesar Galerius. Today only the two main pillars and one secondary are preserved, which are connected to each other by a brick arch. Also is preserved as part of the relief decoration.
Connection with my country, school subjects	Gables, niches with statues, orthomarbbling and reliefs adorned the whole building, the destination of which was not practical, but honorary and memorial. Caesar Galerius, commander of that part of the Roman Tetrarchy that included the Greek peninsula, wanted his victory over the Persians and his great political power to remain unchanged in the memory of future generations. This is at least evidenced by the surviving relief representations of the pillars. Today, the Arch of Galerius - also known as "Kamara" - is the most recognizable monument in Thessaloniki, after the White Tower. School Subjects: History
Resources	Polyzou E., Balanika M., Konstantinou M. (2017), <i>Unification of archaeological monuments: the case of Rotunda and the Arch of Galerius, Thessaloniki</i> , ISHS. Representation of the Palace Complex of Galerius in Thessaloniki, https://www.youtube.com/watch?v=i2R11kio3_A . (accessed 22/12/21).
Photo/os	 <p>The Triumph Arch of Galerius</p>



Relief on the main pillar



Relief detail

25.Cycladic figurines

Title	Cycladic figurines
Kind of object	Object from museum
Place	Europe/Greece/Museum of Cycladic Art - Athens
Date of creation	3000-1700 BC
Creator	Anonymous sculptors of the Cycladic islands
Description	<p>Marble figurines are the most important creation of Cycladic art. Most of them represent naked female figures with arms folded above the abdomen, slightly bent knees and the head slightly raised back ("normal" type). Most are 20-30 cm long. The heads of the figurines are usually sketchy, with the nose only protruding from the single curve of the face. Other points - such as the ears, chest or whit - can also be rendered in relief. However, in many figurines the details - such as the eyes and the hair - are usually indicated with red, blue or black dye. There are also highly sculpted female figurines, known as "violin-shaped". Their use is usually associated with burial or worship rituals, although the interpretations that have been proposed vary (eg Mother-Goddess). The male figure is rarely represented, mainly in dummies of musicians or warriors.</p>
Connection with my country, school subjects	<p>The Cycladic figurines were the basic aesthetic model of the artistic avant-garde of the early 20th century, which sought minimalism and the disintegration of form, aiming at overcoming the realistic and highlighting the inner expression. These elements were inherent in the marble forms of Cycladic art, which inspired sculptors such as Brancusi, Modigliani, Archipenko, Lipchitz, Giacometti, Barbara Hepworth and Henry Moore, which makes the Greek land the cradle of contemporary sculpture.</p> <p>School subjects: History</p>
Resources	<p>Museum of Cycladic Art, https://cycladic.gr/page/kikladiki-techni (accessed 15/10/21).</p> <p>Museum of Cycladic Art (YouTube Channel), https://www.youtube.com/watch?v=-actmKiW7kc (accessed 15/10/21).</p> <p>Museum of Cycladic Art (YouTube Channel), https://www.youtube.com/watch?v=erl8R-LfHlg (accessed 15/10/21).</p> <p>Stampolidis N. Chr. –Sotirakopoulou P. (2007). <i>Aegean Waves, Artworks of the Early Cycladic Culture in the Museum of Cycladic Art at Athens</i>, Athens.</p>



Photo/os



Marble Violin-shaped figurine



Female limestone bust by Amedeo Montigliani, created 1910-1912.

26. Rotonda, Thessaloniki

Title	Rotonda, Thessaloniki
Kind of object	Historical and religious monument
Place	Greece, Region of Thessaloniki, Thessaloniki city
Date of creation	Circa 306 AD
Creator	The architect is unknown. It was probably built to order by Caesar Galerius.
Description	The Rotonda belongs to the pericentric buildings. It was built as a temple of Zeus or Kaviros or according to others as a Mausoleum of Caesar Galerius. During the early Christian years it was converted into a Christian church, probably dedicated to the Incarnate or Archangels. The early Christian phase of the monument includes the exceptional mosaics that adorn its interior. Even today, the brilliance of the colors, the variety of themes and their excellent technique impress the visitor, although they are preserved in fragments. The Rotonda has been a UNESCO World Heritage Site since 1988.
Connection with my country, school subjects	<p>The Rotonda is located in Thessaloniki, a city with a great strategic and geopolitical position, as it connects the Aegean Sea with the Balkan Peninsula and the rest of Europe. Its location has been valued since Roman times, which is why the four-headed Galerius chose it as its seat in 298 AD, adorning it with a brilliant building complex, part of which is the monument in question.</p> <p>School Subjects: History, Religious Education</p>
Resources	<p>Digital representation of the gallery palace complex, https://www.youtube.com/watch?v=i2R11kio3_A, (accessed 20/12/21).</p> <p>"Ephorate of Antiquities of the City of Thessaloniki (film "ROTUNDA, 2016), https://www.youtube.com/watch?v=h8aGI9g0MdY, (accessed 20/12/21).</p> <p>Manitakis A. (2015). Rotonda, Symbol of cultural Identity of Thessaloniki, Neapolis University, Hephaestus Repository.</p>



Photo/os



Rotonda, overview




Rotonda, the interior of the monument



Rotonda, mosaic detail

27. The four seasons

Title	The four seasons
Kind of object	Painting –Item in a private collection
Place	Greece, Athens, K. Doxiades Privet Collection
Date of creation	1969
Creator	Yiannis Tsarouchis
Description	It is an almost monumental painting (160x300 cm) that depicts the 4 seasons of the year in a special way, as a form of common mortal embodies each season. Spring and Autumn are rendered in the form of a young woman, while Summer and Winter are rendered in the form of a young man. The 4 figures - in the type of Mediterranean man with wheaten skin, black hair and brown eyes - stand in front of a table full of a variety of Mediterranean fruits, representative of each season. In the background there are respectively the inscriptions Sping, Summer, Autumn, Winter.
Connection with my country, school subjects	<p>The painting "4 seasons" is considered one of the most important in contemporary Greek painting. Decoding the symbolism of the otherwise simple, almost linear representation, behind the figures we "read" the cycle of the year as we Greeks live it in our Mediterranean corner. The figures-seasons gathered in front of the big and full of fruits table refer to the Greek tradition which considers the moment of food and family gathering sacred. Thus, through simple, everyday references, the artist praises the simple, everyday person of the people who work hard all year to survive.</p> <p>School Subjects: Arts</p>
Resources	Video presentation of the works "The 4 seasons" and "The 12 months of the year", https://www.youtube.com/watch?v=eRdmSVRtku8&t=144s . (accessed 27/12/21).
Photo/os	 <p>The painting 'The Four Seasons' by Yiannis Tsarouchis depicts four figures standing behind a table laden with various fruits. From left to right: a young woman in a blue dress (Spring), a young man in a white loincloth (Summer), a young woman in a yellow dress (Autumn), and a young man in a grey robe (Winter). The background features inscriptions for each season in Greek: 'ΑΡΩΓΗ' (Spring), 'ΚΑΛΟΚΑΙΡΟ' (Summer), 'ΕΠΟΧΗ' (Autumn), and 'ΧΕΙΜΕΡΑ' (Winter).</p>
	Y. Tsarouchis, The Four Seasons

28. Archaeological Site of Philippi

Title	Archaeological Site of Philippi
Kind of object	Archaeological Site
Place	Europe/Greece/Region of East Macedonia and Thrace/Kavala/Krinides village
Date of creation	356 BC
Creator	The city was established by the Macedonian King Philip II (father of Alexander The Great)
Description	The Archaeological Site of Philippi is lying at the foot of an acropolis in north-eastern Greece on the ancient route linking Europe with Asia, the Via Egnatia. The city of Philippi, re-founded by Philip II on a former colony of Thasians in 356 BCE, was reshaped by the Romans into a "small Rome" with its elevation to a Colonia Augusta of the Roman Empire in the decades following the Battle of Philippi. The vibrant Hellenistic city of Philip II, of which the walls and their gates, the theatre and the funerary heroon (temple) are to be seen, was adorned and transformed with Roman public buildings including the Forum and a monumental terrace with temples to its north. Later the city became a center of Christian faith and pilgrimage deriving from the visit of the Apostle Paul in 49/50 CE and the remains of Christian basilicas and the octagonal church testify to its importance as a metropolitan see.
Connection with my country, school subjects	Archaeological Site of Philippi is one of the many Greek monuments that are listed at the UNESCO's World Heritage List. It is also one of the most important monuments in North Greece as it consists a land where took place important facts during the Hellenistic, the Roman and the early Christian era. Also Philippi is the first European territory where ever taught the Christian faith by Apostle Paul and then spread to the rest of Europe. School subjects: Religious Education, History
Resources	Greek Ministry of Culture and Sports, http://odysseus.culture.gr/h/3/gh351.jsp?obj_id=2387 , (accessed 10/10/21). Greek Ministry of Culture and Sports, https://www.youtube.com/watch?v=kiO8ey84_mM , (video in Greek language) (accessed 10/10/21). Nikolaidou-Patera, M. (2011). Filippi. Athens: Ταμείο Αρχαιολογικών Πόρων (only in Greek). UNESCO Greece, https://whc.unesco.org/en/list/1517/ , (accessed



10/10/21).

Photo/os



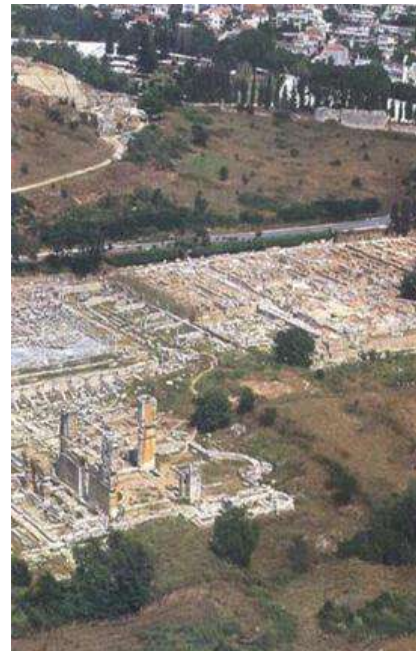
The Basilica



The theatre



The Roman Forum



Archaeological Site of Philippi,
overview

29. The Exodus from Missolonghi

Title	The Exodus from Missolonghi
Kind of object	Painting – Exhibition item in a gallery
Place	Greece, Athens, National Gallery - Alexandros Soutsos Museum
Date of creation	1853
Creator	Theodoros Vryzakis
Description	The painting commemorates the heroic departure of the inhabitants of Missolonghi on the night of April 10, 1826. The composition is divided into two levels: the celestial and the terrestrial zone. In the celestial part - in the center of the composition - we see the Pantocrator blessing the fighters. In the ground part of the composition, on a wooden bridge, the Greek fighters rush out of the gate. Some have been injured or are already dead. The women and children follow. The Turks are waiting. Turmoil, tension and great drama prevail.
Connection with my country, school subjects	The project made a great impression on his fighting spirit. After the fall of Missolonghi, the philhellenic movement flourished again in Western Europe and America. It was typically mentioned that Missolonghi was the biggest defeat of the Greeks and at the same time their biggest victory. For the same historical event (the siege of Missolonghi) the national poet of the Greeks D. Solomos composed the poem with the oxymoronic title "Free Besieged". School Subjects: History
Resources	Short presentation of Th. Vryzakis works, https://www.youtube.com/watch?v=xY2VRT8UecA (accessed 30/12/21). Video – presentation of the painting The Exodus from Missolonghi, https://www.facebook.com/watch/?v=433696827669457 , (accessed 30/12/21).

Photo/os



Th. Vryzakis, The Exodus from Missolonghi

30.The Erechtheion

Title	Erechtheion, Athens Acropolis
Kind of object	Historical monument
Place	Greece, Athens city
Date of creation/building	421-406 BC
Creator	The architect: Mnesikles (probably) The sculptor: Alkamenes or Kallimachus
Description	Erechtheion owes its name to the hero Erechtheus, mythical king of Athens. It is a temple of Ionic style with a peculiar architectural design, due to the morphology of the soil and the need to house different cults: Athena, Poseidon, Erechtheus etc. The emblematic part of the temple is the "Porch of the Caryatids", a portico in the shape of Greek P (Π), where the place of the columns is occupied by 6 female statues. The figures, despite the weight of the overhead structure, stand gracefully, as their youthful body is erased under their almost transparent Doric peplus. Their presence there is interpreted as the above-ground monument of the hero Kekrops, whose tomb is located just below.
Connection with my country, school subjects	The Erechtheion, thanks to its complex building composition and rich sculptural decoration, holds a prominent place in the history of ancient Greek architecture. But also in modern times the monument becomes immediately recognizable internationally by the original in conception and construction "Porch of Caryatides". Five of these daughters are now housed in the Acropolis Museum (Athens) , while the sixth is standing at the British Museum, violently detached from Lord Elgin in the early 19 th century. The Erechtheion, as another building of democratic Athens, reflects the aesthetic, spiritual and political level of the Athenian society of the 5 th c. AD. School Subjects: History, Arts
Resources	Gerding H. (2006), <i>The Erechtheion and the Panathenaic Procession</i> , American Journal of Archaeology, vol. 110, No 3. Karyatids' photo Gallery in Athens' Acropolis Museum, https://www.theacropolismuseum.gr/en/other-monuments-periklean-building-programme/erechtheion (accessed 17/11/21). The Acropolis Museum (Erechtheion), https://vimeo.com/429995065 (accessed 17/11/21) The Erechtheion Gallery in Athens' Acropolis Museum, https://www.theacropolismuseum.gr/en/other-monuments-periklean-



[building-programme/erechtheion.](#) (accessed 17/11/21).

Photo/os



The Erechtheion, general view



The Erechtheion, The Porch of Caryatides

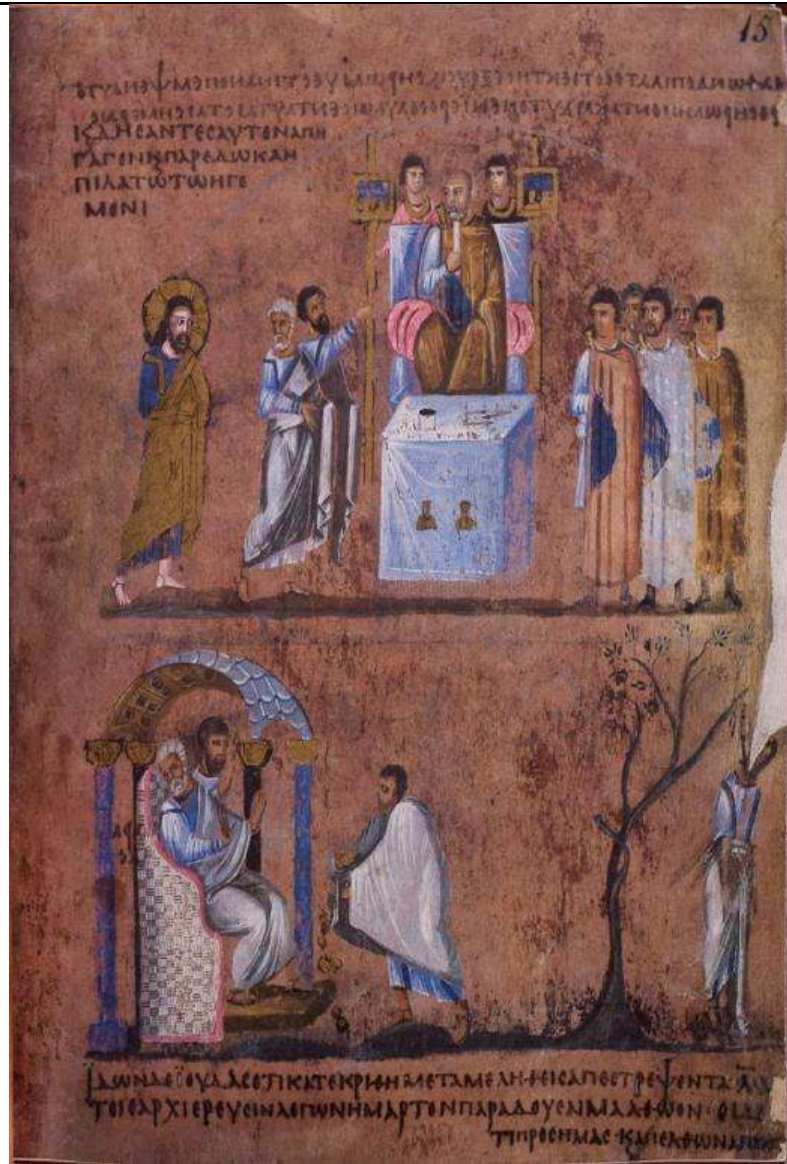
Monuments of Italy

1. Codex Purpureus Rossanensis (The Rossano Gospels)

Title	Codex purpureus Rossanensis (The Rossano Gospels)
Kind of object	Object from museum
Place	Rossano (Cosenza, Italy), Diocesan Museum
Date of creation	5th-6th century
Creator	-
Description	The <i>Codex purpureus Rossanensis</i> is one of the oldest evangelicals in the world, one of the four surviving Greek-language illuminated manuscripts from the East. It owes its name to the characteristic purple color of the pages on which refined Byzantine miniatures depicting episodes of the life of Christ are engraved. The code was most likely made by commission of the imperial family given the peculiarity of the use of purple. Since 2015 it has been inscribed by UNESCO in its register of the «Memory of the World».
Connection with my country, school subjects	The presence of the <i>Codex</i> in the Diocesan Museum of Rossano testifies to the vitality and spread of the Byzantine civilization in Southern Italy in the late ancient and medieval ages, especially in Calabria, where evidently the precious manuscript was brought from the East by virtue of the close cultural and religious bond that linked eastern monasticism and the regions of southern Italy. School subjects: History, History of Art, Chemistry, Religious Education.
Resources	Codex rossanensis, https://www.codexrossanensis.it (accessed 10/1/2022). Diocesan Museum (with virtual tour inside), https://www.museocodexrossano.it (accessed 10/1/2022). Municipality of Rossano, http://www.rossano.eu/il-codex-purpureus (accessed 10/1/2022). Unesco, http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-8/the-codex-purpureus-rossanensis/ (accessed 10/1/2022).



Photo/os



The kodex of Purpureus Rossanensis

2.The Bronzes of Riace

Title	The Bronzes of Riace , (statue A and statue B or the representation of two warriors)
Kind of object	Object from museum
Place	Museo Archeologico Reggio Calabria
Date of creation	Severe Period, 450 BC
Creator	Agelada the Young sculptor (Polinice) and Alcamene the Old (Alcamene) sculptor
Description	Statue A depicts a young man with long hair and a curled beard; a warrior without a shield and weapons. The right arm is extended along the hip, the left one is bent; the head is turned decidedly to the right. Statue B is taken in the same position as the companion statue, but the "linea alba" is flexible and arched and the head has only a slight offset towards its right. Both bronzes have eyes of stone and ivory, while the lips and nipples are of red copper. It is likely that the two statues were colored (ancient sources recall that sometimes the bronze sculpture was treated with bitumen).
Connection with my country, school subjects	<p>Riace Bronzes are two bronze statues of Greek origin dating back to the 5th century BC. received in an exceptional state of conservation. The two statues - found on August 16, 1972 near Riace Marina, in the province of Reggio Calabria - are considered among the most significant sculptural masterpieces of Greek art, and among the direct testimonies of the great sculptors of the classical age. The hypotheses on the origin and on the authors of the statues are different, but there are still no elements that allow us to attribute the works with certainty to a specific sculptor. The Bronzes are located in the National Museum of Reggio Calabria, where they were brought back on 12 December 2014, after removal and stay for three years (with related restoration works) at Palazzo Campanella, seat of the regional council of Calabria due to the renovation works of the same museum. The Bronzes have become one of the symbols of the village itself and of the city of Reggio Calabria.</p> <p>School subjects: History, History of Art, Chemistry</p>
Resources	<p>Archeological Museum at Reggio Calabria, https://www.museoarcheologicoreggiocalabria.it/ (accessed 11/01/2022).</p> <p>ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development, https://www.enea.it/it/seguici/news/basi-antisismiche-per-sicurezza-bronzi-di-riace (accessed 11/01/2022).</p> <p>Italian Encyclopedia of Sciences, Letters and Arts started by the Giovanni Treccani Institute,</p>



https://www.treccani.it/enciclopedia/bronzi-di-riace_%28Enciclopedia-dell%27-Arte-Antica%29/ (accessed 11/01/2022).

Photo/os



The Statue A



The Statue B

3.The Cattolica of Stilo

Title	The Cattolica of Stilo (small Byzantine church)
Kind of object	Religious monument
Place	Municipality of Stilo
Date of creation	between the 9th and 10th century
Creator	-
Description	The catholic of Stilo is a Byzantine architecture, similar to the typology of the Greek cross church inscribed in a square, typical of the middle-Byzantine period. Inside, four columns divide the space into nine parts, roughly equal in size. The central square area and the corner ones are covered by domes on columns of equal diameter, but the central dome is slightly higher and has a larger diameter. On the eastern side there are three apses.
Connection with my country, school subjects	<p>The construction of the Cattolica is due to the oriental monks, who, in the last period of the Byzantine dominion, X and XI centuries, settled on the slopes of Monte Consolino. They lived in agglomerations of natural caves that took the name of laura, still present on the site, some of which retain traces of old frescoes. As happened throughout Calabria, Stilo also benefited from the cultural enrichment brought by the Byzantine monks. The effects manifested themselves in all aspects of economic, social and artistic life.</p> <p>Later it became the destination of most of the scholars who dedicated themselves to the investigation of the medieval monuments of southern Italy.</p> <p>The most accredited thesis intends the Catholic as belonging to a monastery, probably dedicated to the Assumption, as evidenced by its etymology and by the citation "per dexeteram Catholicici".</p> <p>School subjects: History of Art, Religious Education</p>
Resources	<p>Italian Environment Fund, https://fondoambiente.it/luoghi/cattolica-di-stilo-stilo-14789?ldc (accessed 11/01/2022).</p> <p>Museum center of Calabria, https://musei.calabria.beniculturali.it/musei?mid=814&nome=la-cattolica, (accessed 11/01/2022).</p> <p>The park of the Cattolica, https://www.visitstilo.it/parco-cattolica-stilo/ (accessed 11/01/2022).</p>
Photo/os	





The Cattolica of Stilo

4.The Valley of the Temples

Title	The Valley of the Temples (archaeological park of Sicily)
Kind of object	Historical monument
Place	Agrigento, Sicily, Italy
Date of creation	Between the 6th and 2th centuries
Creator	-
Description	The Valley of the Temples is characterized by the remains of eleven temples in Doric order, three sanctuaries, a large concentration of necropolis (Montelusa; Mosè; Pezzino; Roman necropolis and tomb of Terone; early Christian; Acrosoli); hydraulic works (garden of the Kolymbetra and the Hypogea); fortifications; part of a Roman Hellenistic quarter built on a Greek plan; two important meeting places: the lower Agora (not far from the remains of the temple of Olympian Zeus) and the upper Agora (located within the museum complex); an Olympeion and a Bouleuterion (council chamber) from the Roman period on a Greek plan.
Connection with my country, school subjects	<p>The city of Akragas, defined as "the most beautiful city of all hotels for men" by the Greek poet Pindar, was founded by settlers who came partly from Gela and partly from Rhodes in 580 BC.</p> <p>The Valley of the Temples, sporadically inhabited, was destined for agricultural and artisan production, such as the ceramic workshops, documented by some kilns. Over the centuries the monuments of the classical city were gradually stripped of the blocks, which were used to construct the buildings of Girgenti and the ancient pier of Porto Empedocle.</p> <p>School subjects: History of Art</p>
Resources	<p>Archaeological sites of Italy, https://www.sitiarcheologiciditalia.it/valle-dei-templi-di-agrigento/ (accessed 11/01/2022).</p> <p>Park of Temples valley, https://www.parcovalledeitempli.it/ (accessed 11/01/2022).</p> <p>The temples valley, https://www.lavalledeitempli.it/ (accessed 11/01/2022).</p>



Photo/os



Temple of Concord, view

5.The Cathedral of Monreale

Title	Cathedral of Monreale
Kind of object	Historical monument
Place	Monreale (Palermo, Italy)
Date of creation	1172 ca.
Creator	William II of Sicily (beginner)
Description	The cathedral of Monreale, a town in the metropolitan area of Palermo, in Sicily, was built in 1172 on the initiative of King William II of Altavilla. The exterior of the building presents a great mixture of architectural and decorative styles: the overall structure and the towers are in a typical Norman style and the decorations of the apses, instead, show evident Arabic influences. Inside the cathedral, characterized by three naves inserted in a Latin cross plan, many typical Byzantine mosaics of extraordinary workmanship are preserved, made between the twelfth and thirteenth centuries, among which the Christ Pantocrator present in the apse.
Connection with my country, school subjects	The Cathedral of Monreale represents a symbol of integration, a tangible sign of the Mediterranean melting pot experience that was Sicily in the Middle Age. The presence within the same building of heterogeneous architectural and decorative styles, due to the different dominations that alternated in the island over the centuries (Byzantine, Arab, Norman, Spanish), is an example of the multi-ethnic and multicultural character on which art and culture of Sicily and Italy in general was founded. School subjects: History, History of Art
Resources	Cathedral of Monreale, http://www.monrealeuomo.it (accessed 10/1/2022). Cultural Electronic Network Online Binding up Interoperably Usable Multimedia: http://cenobium.isti.cnr.it (accessed 10/1/2022). Municipality of Monreale, http://www.comune.monreale.pa.it (accessed 10/1/2022).
Photo/os	






The Cathedral of Monreale



The Cathedral of Monreale (interior)

6.Aspromonte National Park

Title	Aspromonte National Park
Kind of object	Other: Naturalistic heritage
Place	Calabria (Italy)
Date of creation	-
Creator	-
Description	Aspromonte National Park is located between the Ionian Sea and the Tyrrhenian Sea. The steep walls and the narrow and suggestive valleys are animated by torrents with impetuous course that turn into fascinating waterfalls. The park is characterized by an enormous animal and plant biodiversity. It is home to oleanders and tamarisks, the black poplar, the willow tree and the black alder; wonderful beech forests and pine forests of laricio pine; and even animals such as the wolf, but also the wild cat, the dormouse, the wild boar and the black squirrel. It reserves to its visitors fascinating paths through the unspoiled nature and beautiful historical and cultural itineraries.
Connection with my country, school subjects	<p>The Aspromonte Massif is located in the southern portion of the Calabrian-Peloritanian Orogene, and is linked to the geological events of the Central Mediterranean, which are mainly governed by the interaction between the European plate and the African plate. Its particular geology is the result of a geodynamic and seismic evolution that began more than 500 million years ago and is still ongoing. A set of mountains, ridges and plateaus alternates with deep valleys carved by natural streams called "fiumare", which over time have shaped the rock and created spectacular waterfalls. At the center of the Mediterranean, it has significant historical, artistic and archaeological presence, evidence of classical, Greco-Roman, medieval and modern culture.</p> <p>School subjects:Physical Science, Geography, History, History of Art</p>
Resources	<p>Aspromonte National Park with inside Photo and Video Gallery, https://www.parconazionaleaspromonte.it (accessed 13/1/2022).</p> <p>Unesco, https://www.unesco.it (accessed 13/1/2022).</p>
Photo/os	 <p>Pietra Cappa: the largest monolith in Europe</p>





The Geosito Cascata Mundu

7.The Etna Park

Title	Etna Park
Kind of object	Other: Naturalistic heritage
Place	Sicily (Italy)
Date of creation	-
Creator	-
Description	Etna Park, which surrounds the highest active volcano in Europe, is located on the east coast of Sicily and encompasses a unique natural environment, with a rare combination of landscapes, geodiversity and volcanic phenomena. Due to its climate and meteorological factors, for its morphology there are lava landscapes, rocky layers and slopes, wild and rugged, cones of slag and deep valleys with massive lava walls. There are forests, wetlands, grasslands, rocky ridges that form a unique environmental mosaic, and a rich and diverse fauna, with some species that show specific ecological adaptations.
Connection with my country, school subjects	<p>Etna's genesis is linked to the geodynamic evolution of the Mediterranean basin. Thanks to its 2700 years of eruptive activity, the maximum height of the volcanic cone today exceeds 3300 meters. Moreover, its structure, the chemistry of volcanic rocks, the climatic conditions and the presence of plants and animals that interact with the substrate, have determined the evolutionary history of the ecosystems present on the slopes of Etna.</p> <p>Etna is also linked to some myths such as the one according to which the activity and the ashes and lava eruptions of the volcano would be the fiery "breath" of the giant Enceladus trapped for eternity in an underground prison under Mount Etna, earthquakes would be caused by its turning between the chains.</p> <p>School subjects: Physical Science, Chemistry, Geography, History, Literature</p>
Resources	<p>Parco Etna, https://parcoetna.it (accessed 13/1/2022).</p> <p>Parks, https://www.parks.it (accessed 13/1/2022).</p> <p>Sicilia parchi, https://www.siciliaparchi.it (accessed 14/1/2022).</p> <p>Unesco, https://www.unesco.it (accessed 13/1/2022).</p>

Photo/os



The Etna



The Park of Etna


8. Pompei

Title	Pompei
Kind of object	Archeological site
Place	Campania
Date of creation	VII-VI BC
Creator	Unknown
Description	<p>Pompeii, with its 66 hectares of which about 50 excavated (including suburban areas), is a unique set of civil and private buildings, monuments, sculptures, paintings and mosaics of such importance for the history of archeology and antiquity. to be recognized as a World Heritage Site by UNESCO. The ash and lapilli that buried the city following the eruption of Vesuvius in 79 AD, narrated in the two famous epistles of Pliny the Younger, have in fact allowed an exceptional conservation allowing to have a vivid image of the organization of the Roman towns.</p>
Connection with my country, school subjects	<p>The ancient city stands on a plateau controlling the Sarno river valley, at the mouth of which there was an active port. The visitor can now enter it by accessing one of the ancient doors, which were located along the walls (entrance of Porta Marina), walking through its ancient cobbled streets along which it is possible to visit modest and rich houses, with their own decorative elements. both walls and floors, shops, the Forum with its public spaces and buildings, the sacred areas, the spa complexes and the buildings for performances in the theatre district and in the amphitheater. The information on the origins of the town, probably Etruscan, is uncertain, and only thanks to archaeological investigations it was possible to identify the most ancient testimonies, which date back to between the end of the seventh and the first half of the sixth century BC, when the first one was built, local gray tuff wall, called 'pappamonte', delimiting an area of 63.5 hectares. The construction of a new limestone fortification of the Sarno dates back to the 5th century BC, which was to follow a similar path to the previous one; but only in the Samnite era Pompeii received a strong impulse towards urbanization. Towards the end of the 4th century BC, following a new pressure from the Samnite populations towards the coast, Rome gradually expanded into southern Italy: systems of alliances and victorious military campaigns finally made it hegemonic throughout Campania (343-290 BC.). Pompeii then entered as a partner (ally) in the political organization of the Roman res-publica, which, however, in 90-89 BC, rebelled together with other Italic populations, who claimed equal socio-political dignity against Rome.</p> <p>School subjects: History</p>



<p>Resources</p>	<p>Pompeii sites, http://pompeiiisites.org/pompei-map/ (accessed 22/2/2022).</p> <p>Pompei, https://www.pompei.it (accessed 22/2/2022).</p> <p>Unesco, https://www.unesco.it (accessed 22/2/2022).</p>
<p>Photo/os</p>	<div data-bbox="528 427 1382 909" data-label="Image"> </div> <p data-bbox="842 931 1007 965">The Pompei</p> <div data-bbox="564 1032 1350 1547" data-label="Image"> </div> <p data-bbox="874 1570 1038 1603">The Pompei</p>

9.Sassi of Matera

Title	Sassi of Matera
Kind of object	Cultural Landscape
Place	Basilicata
Date of creation	Neolithic
Creator	Unknown
Description	The Sassi di Matera are two districts of Matera, Sasso Caveoso and Sasso Barisano, made up of rock buildings and architectures dug into the rock of the Murgia of Matera and inhabited since prehistoric times. Together with the Civita district (built on the spur that separates the two Sassi), it constitutes the historic center of the city of Matera.
Connection with my country, school subjects	<p>The Sassi di Matera are an urban settlement deriving from the various forms of civilization and anthropization over time, from the prehistoric ones of the entrenched villages of the Neolithic period, to the habitat of the oriental rock civilization (IX-XI century), which constitutes the urban substratum of the Sassi, with its walkways, canalizations, cisterns; from the civitas of Western Norman-Swabian origin (XI-XIII century), with its fortifications, to the successive Renaissance expansions (XV-XVI century) and Baroque urban arrangements (XVII-XVIII century); and finally from the hygienic-social degradation of the nineteenth and first half of the twentieth century to the displacement ordered by national law in the fifties, up to the current recovery started starting from the law of 1986.</p> <p>School subjects: History, History of Art</p>
Resources	<p>Isassi di matera, https://www.isassidimatera.com (accessed 22/2/2022).</p> <p>Matera, http://www.matera.cloud/it/index.asp?nav=sassi-matera (accessed 22/2/2022).</p>
Photo/os	 <p style="text-align: center;">Sassi of Matera</p>



Sassi of Matera

10.Nuraghi

Title	Nuraghi
Kind of object	Cultural landscape
Place	Sardinia
Date of creation	II BC
Creator	-
Description	They are stone constructions with a truncated cone shape present with different concentrations throughout Sardinia. They are unique in their kind and representative of the Nuragic civilization. About seven thousand remain standing (according to some sources eight thousand), scattered throughout the island, on average one every 3 km ² , strongly distinguishing the Sardinian landscape.
Connection with my country, school subjects	Regarding their function, scholars have not yet expressed a common opinion, while most of them think that they were built in the second millennium BC, starting from 1800 BC. Until 1100 BC some are more complex and articulated, real nuragic castles with the highest tower which in some cases reached a height between twenty-five and thirty meters. In most cases, however, these are towers narrowed upwards, once 10 to 20 meters high, with a base diameter of 8 to 10 meters. In some areas they are located a few hundred meters from each other, as in the Valle dei Nuraghi of the historical region of Logudoro-Meilogu, or in the regions of Trexenta and Marmilla. School subjects: Geography
Resources	Nuraghi, https://www.nuraghi.com (accessed 23/2/2022). Sardegna cultura, http://www.sardegnaicultura.it (accessed 23/2/2022).



Photo/os




The Nuraghi


11. Scala in Milan (Teatro alla scala)

Title	Scala in Milan (Teatro alla scala)
Kind of object	Historical monument
Place	Milan
Date of creation	03/08/1778
Creator	Giuseppe Piermarini
Description	The Teatro della Scala was built according to the recurring pattern of many Italian theatres of the late '700. It has a horseshoe layout, several tiers of boxes and dressing rooms: the layout of the spaces takes into account the functions for which they were intended. The Teatro della Scala is one of the most famous theatres in the world and is known to be the temple of opera.
Connection with my country, school subjects	The Teatro della Scala in Milan takes its name from the square where it was built, the homonymous Piazza della Scala. This, in turn, is so called because the church of Santa Maria alla Scala stood there from 1381. The theatre is particularly famous today because it is considered the most important Italian opera house. Every year on 7 December the opera season is inaugurated: the premiere of the Scala is an unmissable event for all opera fans. Schools Subjects: History, Geography, Music, History of Art
Resources	Theatro alla Scala, www.teatroallascala.org (assessed 22/3/2022).
Photo/os	 <p>Scala in Milan (Teatro alla scala)</p>


12.Pasta

Title	Pasta
Kind of object	Other (food and wine culture)
Place	Middle-South Italy, China
Date of creation	-
Creator	-
Description	<p>Pasta is a dish made from flour, it was born in the middle and the south of Italy.</p> <p>There are different types classified according to the shape.</p> <p>It is considered as an integral part of Italian life and culture, because having lunch or dinner is part of daily life.</p> <p>This is made by the extrusion with bronze supply chains and then with the drying of daughs made of semolina and water.</p>
Connection with my country, school subjects	<p>According to tradition, it was Marco Polo who made Westerners discover pasta after tasting it in China. At the beginning of the fourteenth century there are testimonies of pasta factories in Genoa. Firstly, the consumption of pasta did not spread among the poor classes, due to its high cost at the time.</p> <p>School subjects: Chemistry, History, Geography</p>
Resources	Britannica, https://www.britannica.com/topic/pasta (assesed 23/2/2022).
Photo/os	 <p style="text-align: center;">Pasta</p>


13. The Trulli of Alberobello

Title	Trulli
Kind of object	Cultural heritage
Place	Alberobello in the south of Puglia
Date of creation	Towards the middle of the XVI century
Creator	-
Description	The trulli are traditional dry stone huts with the roof made of dry-set slabs. They have the characteristic rectangular structure with a conical roof in set stones. A door and small windows open on the double-faced walls. The roofs are double-layered: an internal vaulted cladding in conical-shaped stones, culminating in a keystone, and an external waterproof cone made up of limestone slabs. The roofs of the buildings end with a decorative pinnacle that was intended to drive away evil influences or bad luck.
Connection with my country, school subjects	About a thousand years ago (1,000 BC), the area of present-day Alberobello, in southern Puglia, was scattered with rural settlements which later developed to form the current districts of Aia Piccola and Monti. Towards the middle of the 16th century the Monti district was occupied by about forty trulli, but it was only in 1620 that the settlement started its expansion. Over time, the construction of new trulli fell into decline. Between 1909 and 1936, some parts of Alberobello were designated as protected monuments of cultural heritage. School subjects: History, History of art
Resources	UNESCO, https://www.unesco.beniculturali.it (accessed 23/2/2022).
Photo/os	 <p style="text-align: center;">The Trulli of Alberobello</p>


14. The Tremiti islands

Title	The Tremiti islands
Kind of object	Naturalistic heritage
Place	Puglia, province of Foggia
Date of creation	-
Creator	-
Description	The Tremiti islands are an archipelago of the Adriatic sea. Since 1989, part of their territory is in the "Tremiti Islands marine natural reserve". During Roman times they were known as "Trimerus" and the emperor Augustus segregated his niece Giulia there. In this territory the Benedictine monks built the first religious building of the Adriatic islands. During the XI century it reached its maximum splendor, so the bishop of Dragonara wanted a rebuilding in 1045. During the fascist era important people like Sandro Pertini and Amerigo Dumini were confined here.
Connection with my country, school subjects	The Tremiti islands are part of the gorgeous Italian artistic and cultural heritage. Since the antiquity they were coveted by the Latin populations. During modern times lots of important people, like Sandro Pertini, passed through this place for various reasons. School subjects: History, History of art, Religious Education, Geography
Resources	Comune di isole Tremiti, http://www.comune.isoletremiti.fg.it/hh/index.php (assessed 23/2/2022).
Photo/os	 <p style="text-align: center;">The Tremiti islands</p>

15.Spumante

Title	Spumante
Kind of object	Other (food and wine product)
Place	Piemonte, Italia
Date of creation	XIX century
Creator	Gancia brothers
Description	Spumante wine is a type of effervescent wine. The term "sparkling wine" refers to the development of foam which is a manifestation of effervescence, for the production of classic spumante wine neutral vines are used, that is, neither tending to the red color nor to the white color, or more simply "rosé"
Connection with my country, school subjects	<p>The Italian spumante wine owes its birth to the Gancia brothers who wanted to experiment with the champenoise method on local Piemontese grapes. Already at the time of the Romans it was known as the "wine of the foam". With the Renaissance there is some other reference to the production of spumante wine. The great manufacturers still famous were born in '800. Today spumante wine is inevitable at the festivals of Italians .</p> <p>School subjects: Chemistry, Geography, History, Literature</p>
Resources	<p>General site information, https://it.wikipedia.org/wiki/Vino_spumante (assessed 27/2/2022). History of italian spumante, https://www.club-del-vino.com/it/quello-devi-sapere-sullo-spumante/ (27/2/2022).</p>
Photo/os	 <p>The spumante wine</p>


16. Bomarzo Park of the Monsters

Title	Bomarzo Park of the Monsters
Kind of object	Historical monument
Place	Bomarzo (Viterbo, Lazio)
Date of creation	1547
Creator	Pirro Ligorio
Description	The Sacred Wood of Bomarzo or Monster Park is the oldest sculpture park in the modern world. Inside this wood there is an amazing path made of mythological animals and giant stone monsters, surreal buildings, inscriptions, riddles and literary quotes, from Ovid's Metamorphoses to the Divine Comedy and the Decameron. It was realized by the architect Pirro Ligorio on commission of Prince Pier Francesco Orsini.
Connection with my country, school subjects	The Monster Park is located in the Tiber Valley between Lazio and Umbria, and covers an area of about 3 hectares in a forest of conifers and deciduous trees. It is a kind of fairy oasis that dates back to the sixteenth century. Its attractions are full of symbolism, with continuous references to mythology and the world of fantasy. The sculptures were made in basalt, a material available in large quantities in the area; moreover, many of them are marked by enigmatic and mysterious inscriptions. School subjects: History of Art, Geography, History, Literature
Resources	Bomarzo, https://www.bomarzo.net (accessed 21/2/2022). Sacrobosco, http://www.sacrobosco.eu (accessed 20/2/2022).
Photo/os	 <p>The Sacred Wood of Bomarzo or Monster Park</p>



The Sacred Wood of Bomarzo or Monster Park

17.Cinque Terre

Title	Cinque Terre
Kind of object	Naturalistic locality
Place	Liguria
Date of creation	VI century a.C.
Creator	Greek refugees
Description	The Cinque Terre are ancient fishing villages located along a stretch of coastline on the Ligurian Riviera, in the province of La Spezia. In this territory there are five villages: Monterosso al Mare, Vernazza, Corniglia, Manarola and Riomaggiore. These villages are known all over the world for their rare beauty and are considered one of the most attractive tourist resorts in Italy. Since 1997 they have been part of the UNESCO World Heritage list.
Connection with my country, school subjects	<p>The origins of Monterosso date back to the Republican Roman era, but its most ancient fortified core got used even during the Lombard invasion. The foundation of Vernazza date back to the Roman era. Vernazza is famous for its urban structure which is characterised by tower-like houses that line up along the valley course. The village of Corniglia was also founded in this period. The name Corniglia comes from its first two habitants: Cornelia and her son Cornelius. Manarola is part of the municipality of Riomaggiore, but it has even more ancient origins than Riomaggiore, even dating back to the roman era. Some houses are located on a picturesque dark rock outcrop by the sea. The rest of the houses are lined up along the canal of Rio di Groppo. Riomaggiore originates from a group of Greek refugees.</p> <p>School subjects: History, Geography, Art History</p>
Resources	Cinqueterre, https://cinqueterre.a-turist.com/ita/history (assessed 25/2/2022).
Photo/os	





Cinque Terre

18. Italian dialects and languages

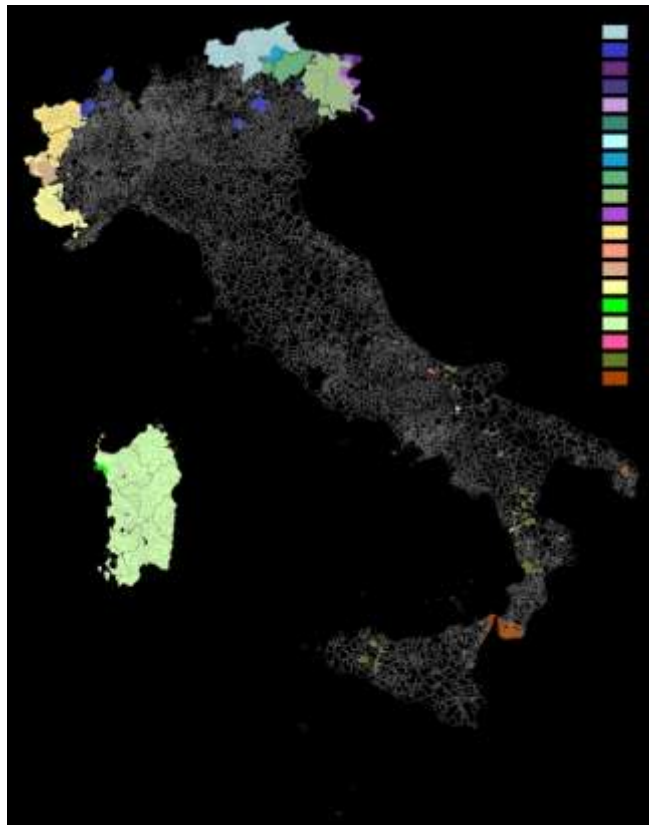
Title	Italian dialects and languages
Kind of object	Intangible heritage
Place	All the regions of Italy
Date of creation	Since the early Middle Ages
Creator	-
Description	Following the fall of the Roman Empire and the fragmentation of the peninsula in many different regional states during the Middle Ages, the Renaissance and until the nineteenth century, Italy presents within its territory a huge variety of languages, different from region to region and from province to province, some considered dialects or regional variants of Italian, others to be considered in all respects true minority languages, such as in the case of Ladin, Sardinian, Friulan, Albanian, and the Greek of Calabria.
Connection with my country, school subjects/textbooks	<p>The presence in the Italian territory of such a variety of languages is a trace of the country's political history and of its multicultural past. The linguistic minorities still present are the remains of the peoples who over the centuries have alternated in its territory mixing with the local population and creating an extremely original ethnic and linguistic mixture. Even the dialects, so numerous and diverse, are the result of the political history of Italy that had to wait until the nineteenth century for its political and linguistic unity.</p> <p>School subjects: Geography, History, Italian</p>
Resources	<p>Interactive map of Italian dialects, https://www.localingual.com/?ISO=IT (accessed 22/02/2022).</p> <p>Video about Italian dialects, https://www.youtube.com/watch?v=e34M6P1NXYM (accessed 22/02/2022).</p>




Photo/os



Image from: https://it.wikipedia.org/wiki/Lingue_dell%27Italia




19. The Square of Miracles

Title	The Piazza dei Miracoli (The Square of Miracles)
Kind of object	Historical monument
Place	Pisa
Date of creation	XII-XIII centuries.
Creator	Different architects, artists, sculptors.
Description	The so-called Piazza dei Miracoli (its real name is Piazza del Duomo) is the most famous square of the Tuscan city of Pisa, since 1987 a UNESCO World Heritage Site. The square is so called because of the four monuments in it that the poet Gabriele D'Annunzio called «miracles»: the Cathedral, the Baptistry of San Giovanni, the monumental Cemetery and the Campanile, better known as the famous Leaning Tower of Pisa, become the symbol of the city.
Connection with my country, school subjects	With its four monuments, the Piazza dei Miracoli is an extraordinary example of the Italian Romanesque and Gothic style, and it witnesses the importance that the city of Pisa had at the time of the Maritime Republics and in the period of the municipal struggles that occurred during the thirteenth and fourteenth centuries in Italy, when Pisa was the rival of some of the most important Italian cities of that period. School subjects: Italian, History, History of Art, Religious Education.
Resources	Virtual tour https://www.opapisa.it/virtual-tour-della-torre/ (accessed 22/02/2022).
Photo/os	 <p>The The Square of Miracles</p>



The Leaning Tower of Pisa

20. The Veiled Christ

Title	The Veiled Christ
Kind of object	Object from museum
Place	Naples
Date of creation	1753
Creator	Giuseppe Sanmartino
Description	The Veiled Christ is one of the most famous and suggestive works in the world and is located in the center of the nave of the Sansevero Chapel in Naples. The work was commissioned by Raimondo di Sangro to a young Neapolitan artist, Giuseppe Sanmartino who managed, working on a single block of marble, to sculpt a life-size statue representing the lifeless body of Jesus Christ, lying on a bed, covered by a transparent marble veil, which reveals the suffering body underneath.
Connection with my country, school subjects	The Chapel of San Severo is located in the heart of the city of Naples and immerses the visitor in the splendor of the Neapolitan Baroque. It is a real treasure chest of sculptures, marbles and ornaments and guards, at the center of the nave, the Veiled Christ carved from a single block of marble. The Neapolitan sculptor was able, through the veil that shows the signs of martyrdom, to convey the suffering that Christ experienced. At the foot of the sculpture the artist also carved the instruments of torture: the crown of thorns, a pincer and nails. School subjects: History, History of Art, Religious Education
Resources	Museo san severo, https://www.museosansevero.it (assessed 22/2/2022).
Photo/os	



The Veiled Christ

21. Tarantella

Title	Tarantella
Kind of object	Dance
Place	South of Italy
Date of creation	XVII century
Creator	-
Description	<p>The term tarantella defines some traditional dances and the corresponding musical melodies of Southern Italy, which are mainly in fast tempo, in various meters: the various types have a metric of melodic and rhythmic phrasing in 6/8, 12/8 or 4 / 4, either more or less, depending on local usage.</p> <p>In Sicily the Tarantella is very common and is danced with very beautiful typical costumes. Each province has its own traditions in this regard.</p> <p>The Sicilian tarantella is almost always danced in pairs, unlike the Neapolitan and Apulian ones.</p>
Connection with my country, school subjects	<p>The first historical source dates back to the early seventeenth century and since its first appearance the dance is linked to the complex and ritual phenomenon of Apulian tarantism.</p> <p>The name derives from Taranta. In the regional dialects of the south, this term identifies Lycosa tarentula, a poisonous spider, widespread in southern Europe. In particular, it is found in the countryside of Taranto.</p> <p>The Tarantella Dance is linked in those areas, to the bite of the tarantula. Tradition, in fact, linked different effects to the venom of this spider, depending on local beliefs. These effects ranged from melancholy to convulsions, reaching agitation and physical pain. Practicing the dance served to cause the expulsion of the poison, through sweat and humors.</p> <p>Not all forms of dance were, of course, linked to this phenomenon. They also danced on public occasions (religious holidays, pilgrimages to shrines, agricultural events) and private (baptisms, weddings, etc.) as an expression of religiosity and joy.</p> <p>School subjects: History, History of music, Dance.</p>
Resources	Comune Sorrento, https://www.comune.sorrento.na.it (accessed 24/2/2022).




Siciliafan, <https://www.siciliafan.it/tarantella-siciliana> (accessed 24/2/2022).

Photo/os



Leon Pero, Tarantella (1879)

22.Opera

Title	Opera
Kind of object	Immaterial heritage
Place	Florence, Rome, Venice, Naples, Milan, etc.
Date of creation	XVI-XVII century
Creator	-
Description	Opera is a specific musical genre that before spreading throughout Europe was born in Italy between the end of the sixteenth and the beginning of the seventeenth century, when some composers and writers experimented a new form of musical theatre in an attempt to recreate the relationship between music and poetry that was imagined to be the base of the works of ancient poetry, in particular of Greek theatre. The Italian opera and the style of the Italian «bel canto» have acquired over the centuries international fame and a very high technical level thanks to the works of composers such as Rossini, Bellini, Donizetti, Verdi, Puccini.
Connection with my country, school subjects	Opera was born as a typical Italian product and Italian was for many centuries the official language of this musical genre, even when foreign composers were engaged in it. Before becoming a European product, in fact, the cities of Florence, Rome, Venice and Naples were the places where this genre asserted itself and gave itself a very precise statute. School subjects: Italian language, History, History of Music, History of Art.
Resources	The New Grove dictionary of Opera edited by Stanley Sadie (1992) http://www.historicopera.com/ (assessed 21/2/2022).
Photo/os	 <p>The Scala theatre</p>



The Scala theatre

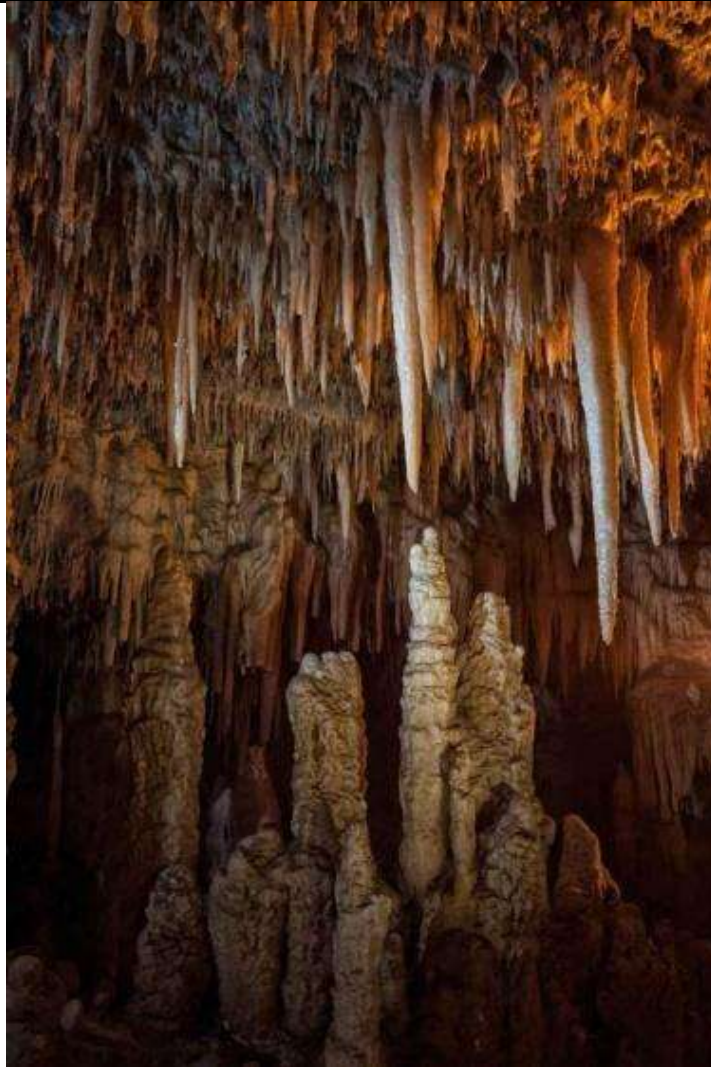
23. The Castellana Caves

Title of monument	Castellana Caves
Kind of object	Landscape
Place	Castellana Grotte in Puglia
Date of creation	Late Cretaceous (ninety-one hundred million years ago)
Creator	-
Description	<p>The Castellana Caves, a complex of underground caves of karst origin, extend for a length of 3348 meters and reach a maximum depth of 122 meters from the surface. The indoor temperature is around 16.5 ° C.</p> <p>The section of the Caves accessible to the public consists of very different environments in shape and size. Stalactites, stalagmites, curtains, columns, precious crystals peep everywhere. The names of the environments crossed are the result of the imagination of the first explorers: the She-wolf, the Monuments, the Owl, the Madonnina, the Altar, the Precipice, the Desert Corridor, the Inverted Column, the Red Corridor, the Dome. Finally, the last and most beautiful cave in the underground system, the White Grotta, defined by the richness and whiteness of the alabaster, is the brightest in the world.</p>
Connection with my country, school subjects	<p>The history of the Grave, the deep chasm at the entrance to the caves, begins in the Upper Cretaceous (ninety million years ago).</p> <p>The colony of molluscs that inhabited the seabed, over the course of millions of years, created a large accumulation of shells which, together with the sand, formed a mixture that, with the passage of time, became more and more massed, forming a layer of limestone of a few kilometers.</p> <p>The Apulian territory literally arose from the bottom of the sea about 65 million years ago, also bringing out this limestone deposit that had formed over the years.</p> <p>Since limestone is a material with little flexibility and therefore extremely rigid, the limestone mass began to break, creating cracks in which rainwater was able to infiltrate and, with its erosion activity, contributed to the formation of Caves as we know them today.</p> <p>School subjects: History, History of Art, Geography</p>
Resources	<p>Beniculturali, https://www.beniculturali.it/luogo/grotte-di-castellana-srl, (accessed 24/2/2022).</p> <p>Grotte di Castellana, https://www.grottedicastellana.it/le-grotte.</p>



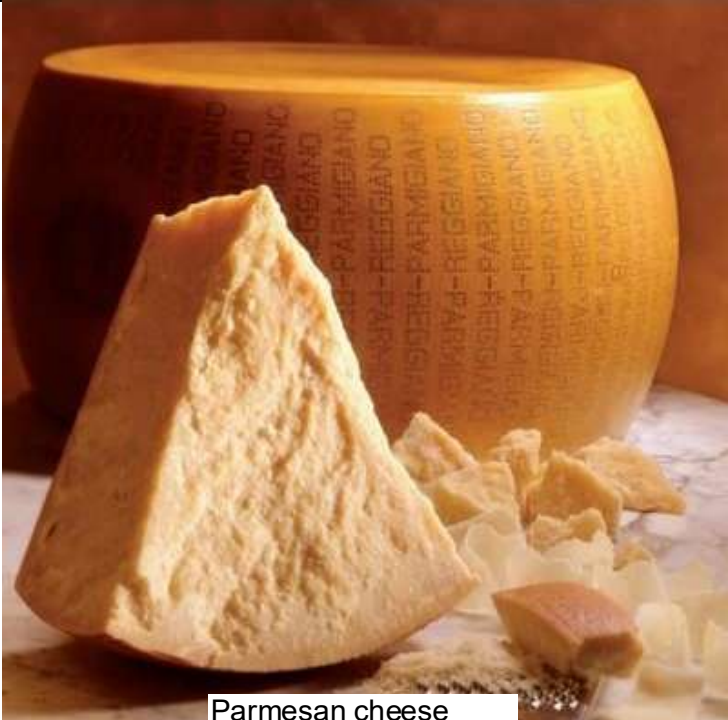
(accessed 24/2/2022).

Photo/os



Castellana Caves

24. The Parmesan cheese

Title of monument	Parmesan cheese
Kind of object	Gastronomic speciality
Place of monument	Northern Italy
Date of creation	07/08/1612
Creator	Benedictine and Cistercian monks
Description	It's a type of cheese which is 100% natural without any preservatives neither lactose and it's good for any ages. It has a cylindrical shape and the crust is of a golden-yellow colour. It has a hard dough consistency and a fragrant, delicate and salty taste. It has a minimum aging of 12 months and maximum of 40. It's a perfect cheese to taste in total purity and it's a must have on pasta and doughs.
Connection with my country, school subjects	<p>The origins of Parmesan cheese date back to the Middle Ages. The first dairies were founded in the Benedictine monasteries of Parma and Reggio Emilia. At the beginning of 1900 the processing of Parmigiano Reggiano develops some innovations in the processing of gastronomic products.</p> <p>School subjects: History, Geography, Chemistry</p>
Resources	Parmigiano-terrealte, https://parmigiano-terrealte.com/storia-del-parmigiano/ (accessed 21/2/2022).
Photo/os	 <p style="text-align: center;">Parmesan cheese</p>

25. Porziuncola

Title	Porziuncola
Kind of object	Religious monument
Place	Assisi
Date of creation	IV century
Creator	-
Description	The little church of Santa Maria degli Angeli was called Porziuncola to indicate the small portion of land on which it stood. It was built in the IV century and after being abandoned for a long time, it was restored by Saint Francis after the "mandate" received by the Crucifix of San Damiano. Here the Saint understood his vocation and founded the order of the Friars Minor (1209). The small building measures only 4 meters by 7 and inside consists of a single hall with a small apse, with an altarpiece of the year 1393. Between 1569 and 1679 to guard the Porziuncola, the Basilica was built on a project by the Perugian Galeazzo Alessi
Connection with my country, school subjects	<p>Franciscanism was born in the center of Italy, in Umbria, a region rich in forests, hermitages, convents and medieval villages, at a time when Italian civilization was also rising. San Francesco, patron saint of Italy and of ecologists, after his conversion, wore the clothes of the penitent and began to wander through the roads of Assisi and the neighboring villages, praying, serving the poorest, comforting the lepers and rebuilding beyond San Damiano, the small churches of San Pietro alla Spira and the Porziuncola. In 1208, during the celebration of the Mass at the Porziuncola, listening to the reading of the Gospel, he understood that he had to dedicate himself to the renewal of the Church and so his apostolic mission began, marrying "our lady of Poverty" so as to be then defined "the Poverello of Assisi".</p> <p>School subjects: History of Art, History, Religious Education, Literature.</p>
Resources	Porziuncola, https://www.porziuncola.org (accessed 22/2/2022) San Francesco patron di Italia , https://www.sanfrancescopatronoditalia.it (accessed 22/2/2022).




Photo/os




The church of Santa Maria


26. The Lake Garda

Title	Lake Garda
Kind of object	Other (Natural landscapes)
Place	Lombardia, Veneto and Trento.
Date of creation	-
Creator	-
Description	Impressive, unexpected: lake Garda is different every time. Peaks and valleys draw the perimeter, villages on the banks interrupt the expansion of the rich vegetation that characterizes this territory. Here you will find echoes of history, magnificent castles and enchanting villas, in perfect symbiosis with the contemporary, declined in a thousand activities and also celebrated at the table, where local products of excellence find space. Oil, wine and citrus fruit.
Connection with my country, school subjects	Lake Garda is the largest of the Italian lakes. The brightness of the environment, the sweetness of the climate, a rich vegetation, consisting mainly of olive trees, palms, cypresses, lemons, oleanders and oranges, together with the grandeur of the landscapes, which are the background to the interesting historical and cultural evidence scattered throughout its territory. The intense color of the water, with a marked blue tone and a transparency that is difficult to find, make Lake Garda a unique destination. School subjects: Geography, History, Literature
Resources	Visit garda, https://www.visitgarda.com/it/lago-di-garda-caratteristiche/ (accessed 22/2/2022).
Photo/os	 <p>The lake Garda</p>

27. The Pantheon

Title	The Pantheon
Kind of object	Historical monument
Place	Roma
Date of creation	I century BC–II century AD
Creator	Apollodoro of Damasco
Description	The Pantheon (in ancient Greek: Πάνθειον [ιερόν], Pántheon [hierón], "[temple] of all the gods"), in classical Latin Pantheon, is a building of ancient Rome located in the Pigna district in the historic center, built as a temple dedicated to all past, present and future deities. It was founded in 27 BC. by the harpinate Marco Vipsanio Agrippa, son-in-law of Augustus.
Connection with my country, school subjects	Compared to the pantheism of other religions, the Greco-Roman one was not a "perfect" pantheism, because it admitted a divinity superior to all the others in strength and wisdom. The Latin divus (God) also derives from the same root, which this common aspect with the Jewish religion will then allow to attribute to the Christian God the Father. School subjects: Geography, History, Arts
Resources	Rome museum, https://www.rome-museum.com/it/agrippa-pantheon-roma.php (accessed 26/2/2022).
Photo/os	 <p>The Pantheon</p>

28. The Sistine Chapel

Title	The Sistine Chapel
Kind of object	Religious Place
Place	Rome
Date of creation	XVI Century AD
Creator	Michelangelo Buonarroti
Description	The Sistine Chapel (in Latin: Sacellum Sixtinum), dedicated to Maria Assunta in Cielo, is the main chapel of the apostolic palace, as well as one of the most famous cultural and artistic treasures of the Vatican City, included in the itinerary of the Vatican Museums.
Connection with my country, school subjects	<p>It is known all over the world both for being the place where the conclave and other official ceremonies of the pope are held (in the past also some papal coronations), and for being decorated with works of art among the best known and celebrated of artistic civilization, among which the famous frescoes by Michelangelo stand out, which cover the vault (1508-1512) and the back wall (of the Last Judgment) above the altar (1535-1541) .It is considered perhaps the most complete and important of that "visual theology, which has been called Biblia pauperum". The walls are decorated with a series of frescoes by some of the greatest Italian artists of the second half of the fifteenth century (Sandro Botticelli, Pietro Perugino, Pinturicchio, Domenico Ghirlandaio, Luca Signorelli, Piero di Cosimo, Cosimo Rosselli and others).</p> <p>School subjects: Geography, History, Arts, Religious Education</p>
Resources	<p>Musei vaticani, https://www.museivaticani.va/content/museivaticani/it/collezioni/musei/cappella-sistina.html (accessed 26/2/ 2022).</p>
Photo/os	 <p style="text-align: center;">The Sistine Chapel</p>



The Sistina Chapel, detail

30. The Uffizi Gallery

Title	Uffizi Gallery
Kind of object	Museum
Place	Florence
Date of creation	XVI century
Creator	Giorgio Vasari
Description	The Uffizi Gallery is a state museum in Florence, which is part of the museum complex called the Uffizi Galleries and including, in addition to the aforementioned gallery, the Vasari Corridor, the collections of Palazzo Pitti and the Boboli Gardens, which together make up for quantity and quality of the works collected, one of the most important museums in the world.
Connection with my country, school subjects	<p>There are the most conspicuous existing collection of Raphael and Botticelli, as well as main groups of works by Giotto, Tiziano, Pontormo, Bronzino, Andrea del Sarto, Caravaggio, Dürer, Rubens, Leonardo da Vinci and others. While the pictorial works of the sixteenth and baroque, but also of the nineteenth and twentieth centuries in Italy are concentrated in Palazzo Pitti, the Vasari corridor until 2018 housed part of the collection of self-portraits (over 1,700), which should then be included in the exhibition itinerary of the Gallery of Statues and Paintings, as already happens in a small part. The museum houses a collection of priceless works of art, deriving, as a fundamental nucleus, from the Medici collections, enriched over the centuries by bequests, exchanges and donations, among which a fundamental group of religious works derived from the suppression of monasteries and convents between the eighteenth and nineteenth centuries. Divided into various rooms set up for schools and styles in chronological order, the exhibition shows works from the 12th to the 18th century, with the best collection in the world of works from the Florentine Renaissance.</p> <p>School subjects: Geography, History, Arts</p>
Resources	<p>Florence museum, https://www.florence-museum.com/it/biglietti-galleria-uffizi.php?msckid=2989be1306d5154f8aa1dc094f6d1959&utm_source=bing&utm_medium=cpc&utm_campaign=S%20Florence%20IT&utm_term=uffizi&utm_content=Uffizi%20firenze (accessed 26/2/2022).</p> <p>Uffizi, https://www.uffizi.it (accessed 26/2/2022).</p>



Photo/os




The Uffizzi Gellery




The Uffizzi Gellery

Monuments of Spain

1. The Cathedral of Santa Anna

Title	Cathedral of Santa Ana
Kind of object	Religious monument
Place	Gran Canaria
Date of creation	XVI- XVII
Creator	Diego Alonso de Montaude; Pedro de Llerena; Juan de Palacios; Martí de Narea y Pedro de Narea; Diego Nicolás Eduardo; José Luján Pérez, etc.
Description	The Cathedral holds artistic pieces of undoubted value, although many of its treasures were plundered during pirate raids. Among the sculptures we can admire an 18th century Virgen del Pino, the 17th century image of San Pedro, a Crucified Christ, a Dolorosa, a San José and a carving of Nuestra Señora de la Antigua sculpted by Luján Pérez. The large paintings of the Stations of the Cross are by José Rodríguez Lozada. The main altarpiece is early 16th century Gothic from the collegiate church of Seo de Urgel.
Connection with my country, school subjects	The structure is considered the most important monument of Canarian religious architecture. School subjects: Geography, History, Religious Education
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=92 (accessed 15/2/2022).
Photo/os	 <p>The Cathedral of Santa Ana</p>

2.Caves of Valeron

Title	Caves of Valeron (Cenobio de Valerón)
Kind of object	Archaeological park
Place	Guía, Gran Canaria
Date of creation	Aboriginal times
Creator	Canarian Aborigines
Description	<p>The Cenobio de Valerón is an ancient collective granary, now protected as an archaeological park. What makes this pre-Hispanic (aboriginal) storehouse different is the fact that it is excavated in a cave.</p> <p>It is estimated to date back more than 800 years. The aborigines who inhabited the area used stone and wooden tools to carve out the rock. With them, they built some 300 chambers or silos to safely store the grain from their harvests. The verticality of its walls and the staggered layout of its chambers surprise the visitor.</p>
Connection with my country, school subjects	<p>Historical Artistic Monument</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html (accessed 15/2/2022).</p>
Photo/os	 <p>The Caves of Valeron</p>

3.San Gebriel's Castle

Title	San Gabriel's Castle (Castillo de San Gabriel)
Kind of object	Historical monument
Place	Island: Lanzarote. Municipality: Arrecife
Date of creation	1572
Creator	Gaspar de Salcedo
Description	<p>In 1571, the Royal Court of the Canary Islands sent the captain of the first presidio, Gaspar de Salcedo, who planned to extend the fortress of Guanapay and conceived a new military project on one of the islets in the port of Arrecife.</p> <p>From indirect information, we know that in 1572 the defence was being built "in accordance with Salcedo's order" (letter from Agustín Herrera to the king).</p> <p>This new castle is located on the islet of El Quemado. It was burnt down in the Turkish-Algerian attack of 1586, so it is thought that the name of the place originates from the burning of the fortress.</p>
Connection with my country, school subjects	<p>The castle is a pole of attraction for visitors not only for the museum's exhibits (objects of the island's Indigenous people, documents about the development of the capital, etc.), but also for the unique view it offers towards the island's capital and the vast Atlantic Ocean.</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=141 (accessed 15/2/2022).</p>

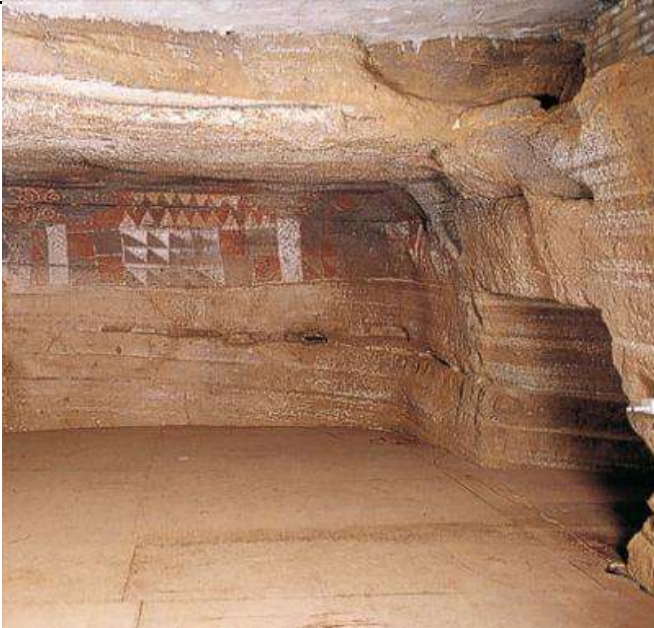


Photo/os




San Gabriel's Castle


4. The painted cave of Galdar

Title	The painted cave of Galdar (Cueva Pintada de Gáldar)
Kind of object	Archaeological zone
Place	Gáldar, Gran Canaria
Date of creation	Aboriginal times
Creator	Canarian Aborigines
Description	<p>The Cueva Pintada de Gáldar is the most important rock art site in the Canary Islands. It was discovered by chance in 1873 during agricultural work.</p> <p>The enclosure is excavated in the volcanic tuff, forming a large rectangular space. The paintings are arranged in panels on three of the walls. The motifs depicted are exclusively geometric, the most common figures being concentric circles, triangles facing each other at their bases, squares and lines. The colours used by the ancient Canarians to give form to these scenes, and which are still in good condition, were red, white and black.</p>
Connection with my country, school subjects	<p>Archaeological Excavation site. Cultural interesting</p> <p>School subjects: Geography, History, Arts</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=86 (accessed 15/2/2022).</p>
Photo/os	 <p>Cueva Pintada at Galdar</p>


5.Cave of the Guanches

Title	Cave of the Guanches (Cueva de Los Guanches)
Kind of object	Archaeological Zone
Place	Icod de los Vinos, Tenerife
Date of creation	Aboriginal times
Creator	Canarian Aborigines
Description	<p>At the beginning of the 1990s, one of the side entrances was excavated, with the discovery of a secondary individual burial in a pit, in which part of the lower skeleton of an individual had been deposited, integrated in a level of occupation defined by a combustion structure, as well as an ergological repertoire similar to that recovered in previous interventions.</p> <p>In the outer area, a set of artificial constructions were documented, circular and oval-shaped enclosures, built with dry stone walls in a few courses, which could be associated with pastoral activity and which extend to the edge of the cliff. Surface remains such as those mentioned above are to be found all over the surrounding badlands.</p>
Connection with my country, school subjects	<p>Cultural interesting</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canaria, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=961 (accessed 15/2/2022).</p>
Photo/os	 <p style="text-align: center;">Cave of the Guanches</p>


6.El Julan

Title	El Julan
Kind of object	Archaeological zone
Place	El Pinar, El Hierro
Date of creation	Discovered in 1873
Creator	Canarian Aborigines
Description	<p>This steep slope, located on the southern slope of the island, preserves important remains of a primitive Bimbache settlement, with engraved panels, shells and meeting places.</p> <p>As a cultural park, El Julan also has an Interpretation Centre, with two exhibition floors on the life of the aborigines of El Hierro, the Bimbache or Bimbache people, and in particular on the cultural manifestations they left in El Julan, including the Tagororor or meeting place and Los Letreros and Los Números, the latter being true "jewels" for study. It also has two dwellings for housing researchers.</p>
Connection with my country, school subjects	<p>Cultural interesting, Cultural park</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=1094 (accessed 15/2/2022).</p>
Photo/os	 <p>The Cathedral of Santa Ana</p>


7. Cultural space «El Tanque»

Title	Cultural space “El Tanque”
Kind of object	Historic monument
Place	Santa Cruz de Tenerife, Tenerife
Date of creation	1930
Creator	CEPSA (oil company)
Description	The tank 69 is an enormous drum that was used for many years for the refining and storage of crude oil, integrated in the CEPSA refinery. It is a cylindrical piece 50 metres in diameter and almost 20 metres high, which represents one of the last vestiges of an industry that has formed part of the urban geography of Santa Cruz over the last half century. It retains its original exterior and interior appearance, having been adapted to its new cultural use with minimal architectural intervention through the incorporation of materials from scrapyards.
Connection with my country, school subjects	Cultural interesting School subjects: Chemistry, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=1125 (accessed 15/2/2022).
Photo/os	 <p style="text-align: center;">El Tanque</p>


8.Fiesta de la rama

Title	“Fiesta de la rama”
Kind of object	Religious Festivity
Place	Agaete, Gran Canaria
Date of creation	1972
Creator	Aboriginal times. The Marian devotion in the municipality of Santa María de Guía dates back to the 16th century, when the conqueror Sancho de Vargas built a chapel dedicated to the cult of the Virgin Mary.
Description	<p>In the beginning, the aborigines used to go down from the mountain of Tirma to the sea to perform this act, asking the gods for rain in times of drought.</p> <p>Nowadays, Agaete's festival is held in honour of the Virgen de las Nieves, and consists of thousands of people dancing through the streets to the rhythm of music while waving branches in the air until they reach the sanctuary of the Virgin. These dances are held once a year on the 4th of August.</p>
Connection with my country, school subjects	<p>Cultural interesting</p> <p>School subjects: Geography, History, Literature, Religious Education</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html (accessed 15/2/2022).</p>
Photo/os	 <p>Fiesta de la rama</p>


9. Festivity "Los corazones de Tejina"

Title	Festivity "Los corazones de Tejina"
Kind of object	Festivity
Place	Tejina, San Cristóbal de La Laguna, Tenerife.
Date of creation	Second half of the XIX century
Creator	Unknown
Description	The hearts remain hanging throughout Sunday and part of Monday. On Monday afternoon, a young man climbs up the structure and throws the fruit and some vouchers - redeemable for the cakes - to a crowd of young people who are jostling for the trophy: the bread cake. They are taken down on Tuesday morning.
Connection with my country, school subjects	Cultural interesting. This is one of the most impressive traditions of the island, which is why the residents of the town of Tejina are eager to keep the tradition alive. School subjects: Geography, History, Literature, Religious Education
Resources	Asociason Corazones de Tejina, http://www.corazonedetejina.com (accessed 7/1/2022). Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html (accessed 15/2/2022).
Photo/os	 <p>Festivity "Los corazones de Tejina"</p>


10. The windmills of the island of Fuerteventura

Title	The windmills of the island of Fuerteventura
Kind of object	Historical monument
Place	Several municipalities on the island of Fuerteventura
Date of creation	XVIII
Creator	The farmers
Description	Windmills have become part of the island landscape, becoming silent witnesses of the past, in which they played an important role in the economy of the islands. In the case of Fuerteventura, they existed profusely due to the fact that this type of windmill was developed mainly in arid or desert regions, using wind as a source of energy to make up for the lack of water currents. The almost permanent presence of air currents on the islands and the orography of the island, characterised by the extensive plains broken only by these peculiar buildings, contributed to this. Their typologies are made up of two very different types, but one of them predominates numerically.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=1087 (accessed 7/1/2022).
Photo/os	 <p>The windmills of the island of Fuerteventura</p>


11.El Teide National Park

Title	El Teide National Park
Kind of object	Archaeological site and nature park
Place	La Orotava, Tenerife
Date of creation	-
Creator	-
Description	It is the highest peak in Spain, located in Tenerife and it belongs to the Canary archipelago. It measures 3715 metres above sea level and 7500 metres above the ocean floor. Teide's altitude also makes the island of Tenerife the tenth highest island in the world. The last eruption of Teide corresponds to the black lava that covers the cone, and has been dated to between the 7th and 10th centuries. Teide is part of the national park of the same name, declared a World Heritage Site by UNESCO on 28 June 2007. It is also a protected natural area in the category of natural monument that includes the Teide-Pico Viejo volcanic complex.
Connection with my country, school subjects	National Park and World Heritage School subjects: Geography, History
Resources	Wikipedia, https://es.wikipedia.org/wiki/Teide#:~:text=Cuenta%20con%20una%20altitud%20oficial,el%20Mauna%20Loa%2C%20ambos%20en (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">El Teide National Park</p>

12. La Gordejuela

Title	La Gordejuela
Kind of object	Ruins
Place	Los Realejos, Tenerife
Date of creation	It was actually a pumping station approved in 1903 and built between 1904 and 1906 to lift water to the top of the cliff, 270 metres above sea level.
Creator	José Galván Balaguer was the author of the original plans
Description	La Gordejuela is an old water elevator, a hydraulic pumping station that is now in ruins, but it is still a picturesque place, located at the end of a cliff and whose function was to use the water that was born there.
Connection with my country & school subjects	Chosen as one of the most beautiful ruins in Spain School subjects: Geography, History
Resources	Listarojapatrimonio, https://listarojapatrimonio.org/ficha/elevador-aguas-gordejuela/ (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">La Gordejuela</p>


13. City of La Laguna

Title	City of La Laguna
Kind of object	Ciudad Histórica/ Conjunto histórico
Place	La Laguna, Tenerife
Date of creation	The city of La Laguna appeared after the conquest of the island, which ended in 1497.
Creator	The city has been in existence for more than five centuries, after Alonso Fernandez De Lugo incorporated the island into the Crown of Castilla in 1494. Three years later, in 1497, San Cristóbal was founded on the shores of an inland lake to the north of the island.
Description	It was the first colonial city without walls to preserve practically intact its original 15th century layout, which served as a model for many colonial cities in America. Its streets, marked by an attractive commercial, gastronomic and leisure activity, are full of monuments and historic buildings.
Connection with my country, school subjects	Monument of World Heritage School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">City of La Laguna</p>


14.Lercaro Palace (La Laguna)

Title	Lercaro Palace (La Laguna)
Kind of object	Monument
Place	La Laguna, Tenerife
Date of creation	Late XVI century
Creator	Francisco Lercaro de León, teniente de Tenerife
Description	The Lercaro House is one of the headquarters of the Museum of History and Anthropology (MHA). This building is located in the historic centre of the municipality of San Cristóbal de La Laguna, a city declared a World Heritage Site by UNESCO in 1999, and dates back to the end of the 16th century, when the Lercaro family, a family of Genoese merchants who arrived on the island after the Conquest, began its construction.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canaria, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=1030 (accessed 7/1/2022). Museo de Tenerife, https://www.museosdetenerife.org/mha-museo-de-historia-y-antropologia/museo/casa-lercaro/ (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Lercaro Palace</p>


15.Casa De Los Capitanes Generales

Title	Casa De Los Capitanes Generales
Kind of object	Historical monument
Place	Tenerife/ La Laguna
Date of creation	1624- 1631
Creator	Captain General of Tenerife, D. Diego de Alvarado Bracamonte
Description	This house, also known as Casa Alvarado Bracamonte, was built between 1624 and 1631 by the then Captain General of Tenerife, Diego de Alvarado Bracamonte. It would later become the residence of the Captains General of the Canary Islands, the name by which the building is popularly known.
Connection with my country & school subjects/textbooks	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=266 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Casa De Los Capitanes Generales</p>


16. Castle of San Felipe

Title	Casle of San Felipe
Kind of object	Historical monument
Place	Puerto de la Cruz (Tenerife).
Date of creation	Ends in 1655
Creator	Alonso Dávila Guzmán
Description	<p>The castle of San Felipe is located at the mouth of the ravine of the same name, on crags. Its construction dates back to the 17th century and was completed in 1655. The structure is polygonal in shape and was accessed by a wooden bridge and a drawbridge over a moat. Seawater entered this moat during high tides, before the flood that occurred in 1826. To the right of the entrance door was the guardhouse, and to the left was the gunpowder magazine. The first floor was used to house the garrison.</p> <p>The sentry box faces the sea, with a doorway, embrasure, plinth, cornice and a red tosca coping. The coat of arms of Philip IV stands out on the façade.</p>
Connection with my country, school subjects	<p>Cultural interesting</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=255 (accessed 7/1/2022).</p>
Photo/os	 <p>Castle of San Felipe</p>


17. Silbo gomero

Title	Silbo gomero
Kind of object	Other (Language and communication mode)
Place	La Gomera
Date of creation	-
Creator	Los gomeros
Description	A mode of language and communication used by the inhabitants of the island of La Gomera for centuries, it has been declared Oral, Cultural and Intangible Heritage of Humanity by UNESCO.
Connection with my country, school subjects	Intangible Cultural Heritage School subjects: Spanish language, History
Resources	Gevic, https://www.gevic.net/info/contenidos/mostrar_contenidos.php?idc=42&idcap=112&idcon=1023#:~:text=El%2030%20de%20septiembre%20de,la%20Humanidad%20por%20la%20UNESCO (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Silbo gomero</p>


18.Caserio de Masca

Title	Caserío de Masca
Kind of object	Historic Set
Place	Buenvista del Norte, Tenerife
Date of creation	-
Creator	-
Description	The historical site of Masca is located in the interior of the Teno Massif, the oldest geological unit on the island of Tenerife, next to the Anaga Massif. It is criss-crossed by deep ravines caused by millennia of volcanic inactivity and the continuous action of rain erosion.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=907 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Caserío de Masca</p>


19. Neighbourhood of Vegueta

Title	Neighbourhood of Vegueta
Kind of object	Historic Set
Place	Las Palmas de Gran Canaria/ Gran Canaria
Date of creation	1478
Creator	Juan Rejón, conqueror of the island of Gran Canaria
Description	<p>Vegueta is the foundational district of the Spanish city of Las Palmas de Gran Canaria, it is included in the district of Vegueta, Cono Sur and Tarifa. It was declared a National Historic-Artistic Site by Decree of 5 April 1973.</p> <p>The district owes its name to the fertile plain that extended around the Royal fortification of Las Palmas, and was initially called "la Vegueta de Santa Ana". From then on it would be the centre of the political, religious and administrative life of the island.</p>
Connection with my country, school subjects	<p>Cultural interesting</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=89 (accessed 7/1/2022).</p>
Photo/os	 <p>Neighbourhood of Vegueta</p>

20.Villa de Betancuria

Title	Villa de Betancuria
Kind of object	Historic Set
Place	Fuerteventura
Date of creation	1404
Creator	Jean de Béthencourt, conqueror of the island of Fuerteventura
Description	It was the ancient capital of Fuerteventura from 1405 to 1834. The image of the Virgin of Peña can be found in the hermitage of Vega de Río de Palmas, located in the centre of the island, although it was razed to the ground on several occasions by pirate attacks.
Connection with my country, school subjects	Cultural interesting School subjects: History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=189 (accessed 7/1/2022).
Photo/os	 <p>The Cathedral of Santa Ana</p>


21. Neighbourhood of Triana

Title	Neighbourhood of Triana
Kind of object	Historic Set
Place	Las Palmas de Gran Canaria, Gran Canaria
Date of creation	XV century
Creator	-
Description	<p>Shortly after its foundation, the population centre of the city of Las Palmas de Gran Canaria (the district of Vegueta) expanded, crossing the Guniguada ravine.</p> <p>Thus was born the Triana neighbourhood, a commercial area whose main axis is the street of the same name.</p> <p>With the arrival of the 20th century, a profound architectural renovation began to take place in Triana.</p>
Connection with my country, school subjects	<p>Cultural interesting</p> <p>School subjects: Geography, History</p>
Resources	<p>Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=90 (accessed 7/1/2022).</p>
Photo/os	 <p style="text-align: center;">Neighbourhood of Triana</p>


22. Villa de Teguisse

Title	Villa de Teguisse
Kind of object	Historic Set
Place	Teguisse, Lanzarote
Date of creation	XVI century
Creator	Maciot de Bethencourt
Description	The old part of the town is built around a square with an irregular layout where the façade of the church of Nuestra Señora de Guadalupe is located, and around which the most significant buildings of the town are situated. Among them is the Casa Spinola, built between 1730 and 1780 by Don José Feo Peraza, a house organised around a central courtyard, with a single storey in the front area, while in the back there are other rooms on the roof. The façade has a symmetrical design, with a central panelled door and a stone frame that rises on three steps. It was restored in 1974 and decorated by the artist César Manrique.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=147 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Villa de Teguisse</p>


23.Acclimatisation Garden

Title	Acclimatisation Garden
Kind of object	Historical garden
Place	Puerto de la Cruz, Tenerife
Date of creation	17th August 1788
Creator	Alfonso de Nava y Grimón and Benítez de Lugo
Description	It is located in the Tenerife valley of La Orotava, in the municipality of Puerto de la Cruz. According to the Royal Order of 17 August 1788 by King Carlos III, it was commissioned by Mr. Alonso de Nava y Grimón y Benítez de Lugo. It exhibits species mostly from the tropical and subtropical regions, including Araceae and Bromeliaceae. Precious plants that nature seemed to have granted exclusively to the fortunate climates of the tropics, importing seeds from Asia and America.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=1000 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Acclimatisation Garden</p>

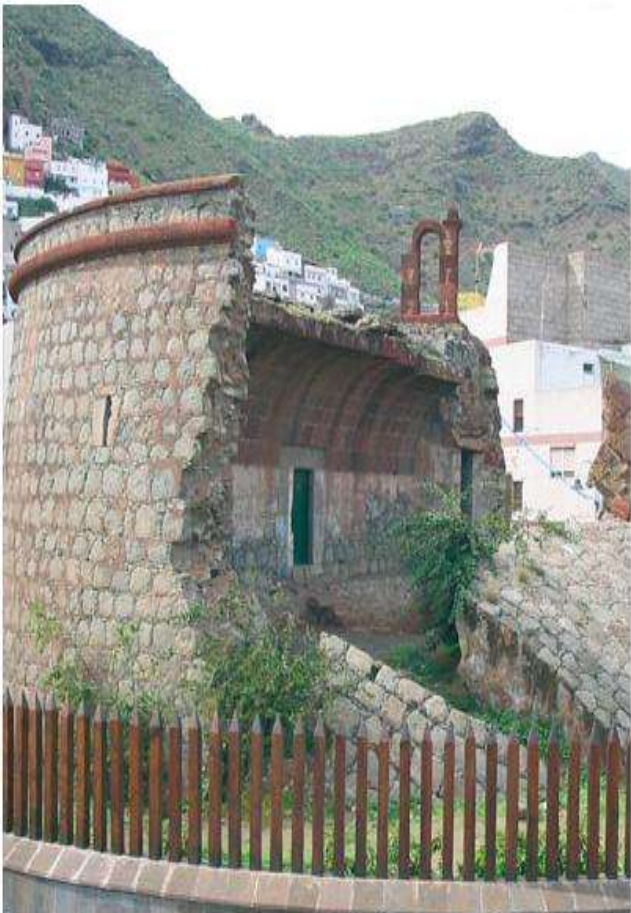
24.Santa Cruz de La Palma Town Hall

Title	Santa Cruz de La Palma Town Hall
Kind of object	Monument
Place	Santa Cruz de la Palma, La Palma
Date of creation	1559- 1563
Creator	Alonso Fernández de Lugo
Description	It is a city with a high artistic value and a rich architectural heritage in Renaissance, Baroque and Neoclassical style. It is situated between cliffs and ravines, and has a linear urban layout, with streets running parallel and perpendicular to the sea. Calle Real is the main street, which runs from the port to the Santa Catalina neighbourhood. Since its foundation, the structure of the city has revolved around three nuclei: the Plaza de España, in the central area, the Convent of San Francisco to the north and the Convent of Santo Domingo to the south.
Connection with my country, school subjects	Cultural interesting School subjects: History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=176 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Santa Cruz de La Palma Town Hall</p>


25. Maspalomas Dunes

Title of monument	Maspalomas Dunes
Kind of object	Protected natural area
Place	San Bartolomé de Tirajana/ Gran Canaria
Date of creation	-
Creator	-
Description	The Maspalomas Dunes are a Protected Natural Area with the category of Special Nature Reserve since 1994, but it was first declared a protected area in 1987. This immense sea of sand is located in the south of the island of Gran Canaria and occupies almost 404 hectares. Together with the Maspalomas Oasis and the Maspalomas Pond, they form a complex whose differentiated ecosystems have a natural and scenic value that is unique in the world. It is a well-preserved area whose environment is strongly influenced by man, which is a serious threat to its survival.
Connection with my country, school subjects	Cultural interesting School subjects: Geography
Resources	Gobierno de Canarias, https://www3.gobiernodecanarias.org/medusa/wiki/index.php?title=Dunas_de_Maspalomas (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Maspalomas Dunes</p>

26. Castle of San Andrés


Title	Castle of San Andrés
Kind of object	Monument
Place	Santa Cruz de Tenerife, Tenerife
Date of creation	1706
Creator	Commander D. Agustín de Robles
Description	Its circular shape can still be seen today, with a drawbridge at the entrance gate. It had accommodation for the garrison, a small gunpowder store, a cistern, and the platform for five cannons, where a bell tower was also placed.
Connection with my country, school subjects	Cultural interesting School subjects: Geography
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=359 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Castle of San Andrés</p>

27.Casa Lercaro La Orotava


Title	Casa Lercaro La Orotava
Kind of object	Monument
Place	La Orotava, Tenerife
Date of creation	XVI century
Creator	Its first owner was Jerónimo de Ponte-Fonte y Pagés
Description	The house has an asymmetrical U-shaped floor plan, with balconies on the second and third floors on the main façade. The door is the most outstanding element on the ground floor, on the right two small windows, two windows on the left, like those on the first floor, are made of bearings. The first-floor balcony has a carved wooden base and a wrought-iron railing.
Connection with my country, school subjects	Cultural interesting School subjects: History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bic/s/index.html?bic=true&cod=242 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Casa Lercaro La Orotava</p>



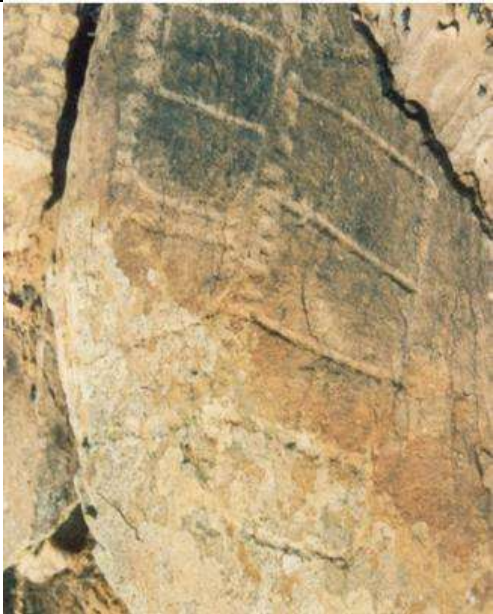
28. Corpus Carpets

Title	Corpus Carpets
Kind of object	Bien de Interés Cultural
Place	La Orotava, Tenerife
Date of creation	1847
Creator	Heiress of the first floral inheritance of Mrs. Leonor Castill
Description	In contrast to other towns where carpets are made using other materials, in La Orotava only flowers and other plant elements such as millet beard, moss or heather are used, chopped and roasted to obtain three shades (green, ochre and black, depending on the roasting time). The alfombristas are not professional artists. The Flower Carpets are an artistic work that requires a sketch in which the master lines are projected. In the early hours of the morning before Corpus Christi, La Orotava wakes up very early and the alfombristas occupy the spaces that have been assigned to them by tradition to undertake the borders of their carpet.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History, Arts
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/ind (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Corpus Carpets</p>

29. Villa of Orotava

Title	Villa of Orotava
Kind of object	Historic Set
Place	La Orotava, Tenerife
Date of creation	From 1498
Creator	Alonso Fernández de Lugo
Description	La Orotava is the town of large mansions and cobbled streets, a city immersed in the heart of the valley that bears the same name. It was part of the menceyato of Taoro, the richest and largest of the nine kingdoms into which the island was divided.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=240 (accessed 7/1/2022).
Photo/os	 <p>Villa de La Orotava</p>

30.Podomorfos

Title	Podomorfos
Kind of object	Archaeological zone
Place	La Oliva, Fuerteventura
Date of creation	Aboriginal times
Creator	Aboriginal people
Description	The rock engravings with podomorphic motifs, attributed to the aboriginal culture of the island, are the most relevant and singular element of the Tindaya Mountain, deserving of the maximum legal protection. The rock engravings of the Montaña de Tindaya constitute a unique cultural space and one of the most spectacular and enigmatic archaeological sites in the Canary Islands.
Connection with my country, school subjects	Cultural interesting School subjects: Geography, History, Arts
Resources	Gobierno de Canarias, http://www.gobiernodecanarias.org/cultura/patrimoniocultural/bics/index.html?bic=true&cod=204 (accessed 7/1/2022).
Photo/os	 <p style="text-align: center;">Podomorfos</p>

PART III: Learning scenarios

EDUCATIONAL SCENARIO I

A. Characteristics

Title: Healers/Doctors of Cultural heritage

A few words about the scenario: The learning scenarios that have been developed apply the conceptual framework for the exploitation of the cultural heritage in education through the strategy of gamification. This framework links the gamification methodology with the model of self-regulated learning and the potential of mobile devices in order to provide new perspectives for the wider use of this methodology in education for the development of high-level thinking skills.

The educational scenarios have been designed on the basis of an online role-playing game on the cultural heritage of Greece, Spain and Italy, which aims to familiarize pupils with the cultural heritage of the three countries, to understand the concept and its different forms and the notion of a common European cultural heritage and to promote a sense of belonging to Europe. The ultimate aim is to make pupils aware of the value of cultural heritage in shaping and preserving collective and individual identity. Finally, the scenarios focus on the development of cognitive, social and motivational factors of self-regulation of learners as well as combined skills of visual, digital and critical literacy and the mobilisation of the learner's thinking.

THE GAME "SAVE THE WORLD"

The game "Save the world", designed in a technology-supported environment (Moodle), consists of a tour of monuments with questions, so that pupils earn points, and aims not only to acquire knowledge or consolidate the knowledge acquired about a monument, its history, its architecture, its function and its subsequent use, but also its relationship with values and traditions, i.e. intangible heritage. It is designed to promote active social protection, i.e. a culturally participatory development leading to responsible social behaviour that respects monuments, the landscape and the environment.

Creators: Vasiliki Manavopoulou , Georgios Tsomis

Age group: 13-16

Link to a subject: ICT, Language, History, Geography, European Studies

Estimated time: 2 teaching hours: combination of synchronous and asynchronous teaching

Supporting material and tools: online game, computers-mobile devices with internet connection, e-class platform, worksheets, digital projector, whiteboard



B. Objectives

The educational scenarios aim to engage pupils with the subject of cultural heritage in a playful and amusing way. In particular, to enable them to understand the concept of cultural heritage and its value in their lives, but also to explore the cultural similarities between people living in different European countries and the elements of their common cultural heritage. Also, to strengthen their sense of belonging to and participation in Europe through exploring Europe's diverse cultural heritage.

In terms of the expected learning outcomes, pupils are expected to identify examples of cultural heritage from their own country and from the other two European countries and to understand cultural heritage and its different forms. They are also expected to be able to develop cooperation skills through group work practice and to reflect on the progress of their actions in the light of possible difficulties encountered and the solutions adopted.

C. Steps/instructions

In the learning scenarios that have been developed, pupils approach the subject of cultural heritage through the model of self-regulation learning in the context of gamification and the use of ICT. They are implemented through a combination of both asynchronous and synchronous teaching according to the flipped classroom model. The basic flow of each scenario consists of five phases. These are the phases of stimulation, activity, communication and collaboration, evaluation and discussion-reflection. At the core of these phases, all three phases of Zimmerman's (2000) cyclical model of self-regulated learning are applied: forethought, performance and self-reflection.

Activity 1

In the stimulation phase, asynchronous teaching at home (flipped classroom) is applied. So, at the beginning of the educational intervention, the learners with their personal access data (username and password) log in to the online course on the Moodle platform. On the home page, after reading the story of the game, they select the doctor character corresponding to their country, enter the corresponding area and they study the archive of the presentation of the eleven elements of the cultural heritage of their country. They then repeat the process by visiting the other two regions and selecting the corresponding doctor character. This phase lasts 15 minutes

Activity 2

In the second phase and during the face-to-face classroom teaching, pupils are given a worksheet with short questions about the monuments in their own country and in the other two countries, which they have come into contact with having studied the presentation file at home in the previous phase. The pupils' answers are expected to show the degree of their familiarity with the cultural heritage of their countries and its various forms. The pupils' questions and answers are followed by a discussion in the classroom. Pupils are encouraged to ask questions, express opinions and views in order to raise the issue of cultural oblivion. The teacher moderating the discussion suggests the online game "SAVE



THE WORLD" as a stimulating way to enhance pupils' familiarity with cultural heritage. This phase lasts 10 minutes.

Activity 3

In the second phase and during the face-to-face classroom teaching, pupils are given a worksheet with short questions about the monuments in their own country and in the other two countries, which they have come into contact with having studied the presentation file at home in the previous phase. The pupils' answers are expected to show the degree of their familiarity with the cultural heritage of their countries and its various forms. The pupils' questions and answers are followed by a discussion in the classroom. Pupils are encouraged to ask questions, express opinions and views in order to raise the issue of cultural oblivion. The teacher moderating the discussion suggests the online game "SAVE THE WORLD" as a stimulating way to enhance pupils' familiarity with cultural heritage. This phase lasts 10 minutes.

Activity 4

In the fourth phase, the evaluation phase, a discussion takes place in the classroom during which the results of the survey are announced and commented on. The pupils comment briefly, orally or in a written form, on the presentations. The teacher also expresses his/her own opinion by commenting positively or intervening with corrective remarks.

This phase ends with the homework task. Pupils can choose the homework they will undertake individually from a variety of suggested topics. In particular, inspired by the story of the game "SAVE THE WORLD", they can compose a short message about saving cultural heritage and, combining it with relevant visual material taken from the game or from the Internet, create a poster to be displayed in the classroom and on their school's blog or website. Alternatively, they can choose a local heritage site in their area that they consider characteristic and, by carrying out relevant field or online research, write an article on it. They can also choose from the monuments of the other two countries the one that impressed or touched them the most and, inspired by it, compose a poetic or prose text.

The texts are intended to be posted on the class blog. The pupils' work is evaluated descriptively by the teacher with detailed comments through the activation of the Comments tool in Word. They are sent via the e-learning platform to each pupil individually. This phase lasts 15 minutes.

Activity 5

In the fifth and final phase, a plenary class discussion is held for feedback and reflection. By creating an appropriate pedagogical climate, pupils are encouraged to get involved and actively participate in the classroom plenary through processes of questioning and expressing opinions and arguments on the subject of cultural heritage.

For this purpose, the teacher asks specific questions about the value of the cultural heritage, the experience of familiarization with the material handled by the pupils and the game, the difficulties they encountered.

At the end of this process, pupils evaluate themselves through a self-evaluation quiz. They check whether they have succeeded in fulfilling their role as heritage doctors, examine whether their cultural memory has been enhanced, whether their relationship with cultural heritage has improved and whether their pre-course views on the subject have changed. At the end of this phase, they are able to obtain the cultural-heritage-doctor-award offered to them. This phase lasts 10 minutes.

D. Instructions for the teacher. Suggestions/Extensibility

The duration of each phase of the scenarios is determined by the teacher according to the potential and needs of the class.

As an alternative activity the teacher could suggest the following topics: 1) Cultural heritage in song, 2) Cultural heritage in poetry, 3) Cultural heritage in painting, 4) Cultural heritage in photography, 5) Cultural heritage in cinema. He/she invites pupils to browse the Internet and listen to songs, read poems and see paintings, photographs or film scenes that refer to elements of the cultural heritage of their country and of Europe. They then choose a song, a poem, a painting, a photograph or a scene from a film and make a post on the course blog on the e-learning platform. The post will be entitled, accompanied by a short presentation and a short text justifying the choice or choices and will end with a list of links that lead to their choices. The activity may be carried out individually or in groups.

Such activities and initiatives are of great importance and worth the effort, as the essence of digital literacy lies not in the development of skills of simple use of any digital tools and features, but in the acquisition of skills such as reasonable and effective handling and critical and creative use. To this purpose, the teacher should be in the role of a constant guide and supporter of the learners.

A.Characteristics

Title: Healers/Doctors of Cultural Heritage

A few words about the scenario: The learning scenarios that have been developed apply the conceptual framework for the exploitation of the cultural heritage in education through the strategy of gamification. This framework links the gamification methodology with the model of self-regulated learning and the potential of mobile devices in order to provide new perspectives for the wider use of this methodology in education for the development of high-level thinking skills.

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C. Steps/Instructions

In the learning scenarios that have been developed, pupils approach the subject of cultural heritage through the model of self-regulation learning in the context of gamification and the use of ICT. They are implemented through a combination of both asynchronous and synchronous teaching according to the flipped classroom model. The basic flow of each scenario consists of five phases. These are the phases of stimulation, activity, communication and collaboration, evaluation and discussion-reflection. At the core of these phases, all three phases of Zimmerman's (2000) cyclical model of self-regulated learning are applied: forethought, performance and self-reflection.

In the educational scenario, the online game "SAVE THE WORLD" aims to serve as an introduction to the first lesson on cultural heritage and as an occasion for discussion on the concept of cultural heritage.

Activity 1

In the first phase, the stimulation phase, the teacher presents the topic and the game to the pupils. Then, the teacher shows the class, via a digital projector, the presentation file of the eleven cultural elements of their country to which the questions of the game refer. During the presentation, pupils are encouraged to ask relevant questions and comments on the topic. This phase lasts 15 minutes.

Activity 2

In the second phase, pupils play the game at home. The teacher has informed them that they can use a search engine to retrieve information from the internet and make use of the information material available in the presentation archives of the monuments of the three countries and posted on his page on the e-learning platform. The children are also informed that the winner will be the one who answers all the questions correctly in the shortest time. This phase lasts 40 minutes.



Activity 3

In the third phase and during the face-to-face teaching, a worksheet with short questions about the monuments of their country and the other two countries is handed out to the pupils, with the aim of demonstrating the degree of familiarity of the pupils with the cultural heritage of their countries and its various forms. The pupils' questions and answers are followed by a plenary discussion in the classroom. Pupils are encouraged to ask questions, express opinions and views in order to raise the issue of cultural oblivion. The teacher suggests that the children visit the website of the game again at home, browse through the three sections corresponding to the cultural heritage sites of the three countries and study the pictures and information material of those sites they think they do not remember well. This phase lasts 10 minutes.

Activity 4

In the fourth phase, the teacher asks the pupils to divide a page in their notebook into two columns. In the left-hand column, they are asked to write three cultural heritage items from each of the three countries that they can recall. In the right-hand column, they should briefly explain why they have retained these particular monuments in their memory, what it is that made them remember them. The teacher asks someone to read an item from his/her list. In a discussion that follows about the similarities and differences between the cultural heritage lists, the teacher encourages the pupils to make observations in relation to the function of cultural memory depending on their individual personalities and interests. This phase lasts 15 minutes.

Activity 5

In the fifth and final phase, a plenary class discussion is held for feedback and reflection. By creating an appropriate pedagogical climate, pupils are encouraged to get involved and actively participate in the classroom plenary through processes of questioning and expressing opinions and arguments on the subject of cultural heritage.

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E. Multimedia material/Indicative bibliography

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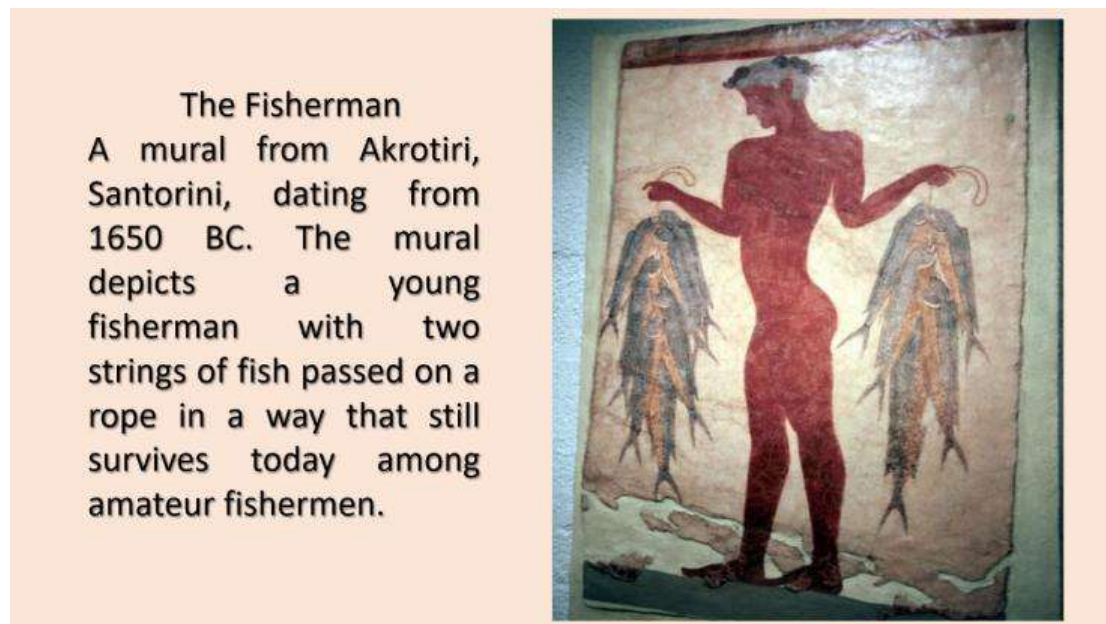
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Zimmerman, B. J. (1989). Models of self-regulated learning and academic achievement. In B. J.

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ANNEX: THE SCENARIO MATERIAL

1. The file of the presentation of the monuments (indicatively one page):



2. The questions on the worksheet (indicative):
 - I. Are you familiar with the cultural heritage of your country, the descriptions of which you have studied?
 - A) All
 - B) Many
 - C) Some
 - D) None
 - II. 2 Are you familiar with the cultural heritage of the two other countries whose descriptions you have studied?
 - A) All
 - B) Many
 - C) Some
 - III. After studying the descriptions of the elements of cultural heritage, you consider that it consists of:

- A) Buildings, monuments, handmade objects, archives, clothing, works of art, books, machinery, historic towns, archaeological sites, etc. - material heritage
- B) Practices, representations, expressions, knowledge, skills, objects and cultural places that people honour, such as festivals. In addition to language and oral traditions, performing arts and traditional arts, etc. - intangible heritage
- C) Landscapes and geographical areas where nature bears elements of cultural practices and traditions
- D) Resources created in digital form (for example digital art and animation) or digitised for the purpose of preservation (including texts, images, videos and sound recordings) - digital heritage
- E) All of the above



ANNEX I

1. The platform H5P (HTML5 Package) –Activities

The platform which will be used for this digital game on “Cultural Heritage” is H5P (HTML5 Package). H5P offers an easy and fast way to create interactive content. H5P is based on HTML5 and the applications run seamlessly on tablets and smart phones. It is free open source software and can be used in at least 2 ways:

- creating an account on the H5P website, creating an activity and embedding it on the website
- installing the H5P plugin and creating content in wordpress, moodle and drupal, etc.

Template of activities

Depending on the activities to be chosen in the formation of the game, seven learning objects have been selected.

1. Single Choice Set

Description

Single choice set allows content designers to create question sets with one correct answering alternative per question, in just a few seconds. The user gets immediate feedback after submitting each answer.

Features

- Sound effects for correct and wrong (sound effects may be turned off)
- Fully responsive design
- Summary at the end showing the solution to all questions
- Single choice sets can be included in Presentation and Interactive video content types

2. Multiple Choice

Description

Multiple Choice questions can be an effective assessment tool. The learner is given immediate performance feedback. The H5P Multiple Choice questions can have a single or multiple correct options per question.

3. True/False Question

Description



True/False Question is a simple and straightforward content type that can work by itself or combined into other content types such as Course Presentation. A more complex question can be created by adding an image or a video.

4. Image Sequencing

Description

A free HTML5 based image sequencing content type that allows authors to add a sequence of their own images (and optional image description) to the game in a particular order. The order of the images will be randomized and players will have to reorder them based on the task description.

The Image Sequencing content type challenges the learner to order a randomized set of images according to a task description.

5. Image Hotspots

Description

Image hotspots make it possible to create an image with interactive hotspots. When the user presses a hotspot, a popup containing a header and text or video is displayed. Using the H5P editor, you may add as many hotspots as you like. The following is configurable:

- The number of hotspots
- The placement of each hotspot, and the associated popup content
- The color of the hotspot

6. Drag the Words

Description

A free HTML5 based question type allowing to create text based challenges where users are to drag words into blanks in sentences.

7. Drag and Drop

Description

Drag and drop question enables the learner to associate two or more elements and to make logical connections in a visual way (using both text and images as draggable alternatives). H5P Drag and drop questions support one-to-one, one-to-many, many-to-one and many-to-many relations between questions and answers.

2. Gamification and Cultural Heritage: Researchers and Activities in Greece, Italy and Spain

In order to address the lack of motivation and involvement of students in educational processes, new methodological strategies have emerged to bring educational processes



closer to the interests and needs of 21st century students. The best way to involve students in the teaching-learning process is to motivate them. Gamification is, therefore, an ideal methodology for motivating students in the learning process (Zichermann & Cunningham, 2011).

Regarding cultural heritage issues, whose importance for young people has been highlighted above in this study, it is worth noting that in recent decades digital technologies have permeated every aspect of the production of general archaeological knowledge, both in terms of data collection, analysis and interpretation, and interaction with the public (Hugget 2019, Morgan 2019). Archaeologists have been experimenting with digital data for a long time, because the archaeological record is often difficult to read and to be explained to the general public, let alone schoolchildren. Digital technologies have helped archaeologists to bridge the communication gap between cultural records of the past and their coupling with the present and the future, a necessity that has been gaining ground over the years. Lately the use of gamification methodology for the enhancement of cultural heritage has been discussed and researched in order to optimize the learners' cultural experience. Museums are primarily a space that encourages the implementation of such educational games.

As gamification in the educational process has been the subject of research, studies, publications and conferences in recent years, some examples of these activities are presented below regarding the countries Greece, Italy and Spain, which participate in the project Erasmus KA227 Culture heritage and Gamification in Education, with emphasis on cultural heritage topics.

Greece

Various papers and studies have been carried out on gamification. Among them, we highlight the thesis entitled "Methodology of gamification utilization for enhancing high-order thinking skills" (2016) by Anna Kassimati. She proposes a new conceptual framework, integrates and connects the principles of cognitive theory through self-regulated learning, with the basic principles of educational games, the basic mechanisms of gamification and the utilization of the possibilities and features offered by mobile devices. This framework aims to provide a good practice in the field of utilizing gamification techniques for educational purposes through mobile devices, which can be effectively applied in more than one educational disciplines for the development of high thinking skills. Chr. Alevisos (2021) refers in his postgraduate thesis "Gamification in education" to both the concept of play and gamification. He outlines the basic characteristics of games and makes extensive reference to the types of games for gamification, its consequences and the theories of gamification in learning and education. He also discusses the context of gamification, the good practices for implementing a gamified environment and the technology available to carry out such gamification projects. He also presents cases of gamification in education and even more specific platforms for gamified education oriented towards the arts, social sciences as well as applied sciences and technology. Stavros Dimitriadis (2015) has also dealt with Gamification in his extensive publication entitled "Learning theories and educational software".

At the 8th Conference on Informatics in Education (8th CIE2016), the paper entitled "The Agile methodology and its application in the learning process enhance Computational



Thinking" was presented by Kotini and Tzelepi (2016). The paper deals with a theoretical game-based framework (gamification) for enhancing learning and cultivating Computational Thinking based on modern agile system development techniques.

At the 5th Panhellenic Educational Conference of Central Macedonia on "Utilization of ICT in Teaching Practice" (Special thematic section: "Technologies, Arts & Culture in Education", Thessaloniki 2018) the paper by M. Peraki entitled "Gamification and self-regulated learning" examined whether an educational scenario in a technology-supported environment (Moodle) based on the theory of self-regulation learning and the technique of gamification can contribute to the development of cognitive, social and motivational factors in the self-regulation learning process.

The thesis of Vasiliki Goula entitled "Gamification and intercultural education: an educational intervention for second grade students" (2019) is about gamification and intercultural education. More specifically, it deals with the study of applications with gamification elements such as points, leaderboards, etc., in an intercultural class of 2nd grade students, who come from different countries and therefore, Greek is not their native language (PSIFIDA: Gamification and intercultural education: an educational intervention for 2nd grade students).

At the 1st Panhellenic Conference on "Educational play in formal and non-formal learning" (National Centre of research and preservation of school material, 2020), the paper by M. Athanasekou and E. Leventi entitled "Art in play - Play in art" had to do with the role of play in art and the role of art in play. The paper "Gamification as a means of mobilising the educational process in primary schools" by D. Amarantidou focuses on the development through play of scenarios applied to real-life situations, mobilising specific behaviours in the context of the game. The main purpose of the project "Creating playful digital quizzes aimed at familiarising students with the ancient Greek language" by N. Apostolou is the presentation of an interesting teaching method, which will facilitate the familiarization of pupils in Elementary School with the ancient Greek language through the creation of educational quiz games as a pleasant experience with pedagogical benefits.

At the 2nd Panhellenic Conference on "Educational play and art in education and culture" (National Centre of research and preservation of school material, 2021), the paper by A. Athanasopoulos entitled "Digital European Museum of Culture" dealt with a pan-European project (An Erasmus+ KA3 Project about digital cultural heritage) on digital cultural heritage, which was successfully completed at European level with posters in a digital forum. The project aimed to promote culture as a factor of cohesion in the European Union. It also looks forward to the creation of a digital museum (Europa square), where Europe's youth will create a digital narrative, inspired by the region in which they live.

At the Digital Heritage International Congress (Digital Heritage International Congress, 2015) the study by Kontogianni and Georgopoulos entitled "A realistic Gamification attempt for the Ancient Agora of Athens" was a first attempt to create a Serious Game for the Ancient Agora of Athens. The aim of this game is to help non-specialists, such as schoolchildren, students, tourists, museum visitors, etc. to gain basic knowledge about the Agora and its monuments.

At the 1st Panhellenic Conference on "Educational game in formal and non-formal learning" (National Centre of research and preservation of school material, 2020), the paper by A. Pagoulatou entitled "The Secrets of Patras: a space-sensitive game as a tool for learning and cultural mediation in the French as a foreign language" focused on the process of designing, developing content and evaluating a game for mobile devices. The game was

developed in the context of a cultural action project aimed at promoting interactivity, cultural curiosity and cultural/intercultural mediation.

Italy

In Italy, several university courses have already been introduced on digital technologies, 3D modelling or computer simulation, which until a few years ago were considered specialised. At the same time, several digital tools are becoming more and more accessible to students, such as virtual reality applications on computers as well as interactive displays in mobile applications (Hageneuer, Schmidt 2020).

At the same time the use of new technologies has increased considerably, permeating every aspect of school and student life. Consequently, it has also influenced the way students think about cultural heritage. Nowadays, the Italian government and of course the museums in Italy have started to consider video games as a useful tool to immerse students in their cultural past and heritage through entertainment (Mariotti 2020a). The curriculum for secondary education encourages projects involving archaeologists that aim to interactively entertain students through educational digital games.

In recent years, "serious games" related to cultural heritage have been developed, gaining the interest of museum institutions, academics and local administrations. As a result, a wide variety of digital games of various forms are appearing:

- trivia, puzzle and mini-games (e.g. "Time Tales - The Etruscans", a serious game for children, designed by two archaeologists (Mariotti, Marotta 2020) in collaboration with a "serious game" company, Entertainment Game Apps Ltd.),
- games in which users participate in interactive exhibitions and visits (e.g. "Inventum" (2018), a 3D application (3D) in AR to enhance the Archaeological Park of Venosa, Potenza),
- games in mobile apps for museums or tourist parks on websites, motivated by a reward or commitment mechanism, e.g.

1. "Mi Rasna", developed by Entertainment Game Apps Ltd. and has to do with Etruscan culture (Amoroso 2020)

2. "Mediterranean" re-developed by Entertainment Game Apps Ltd. and is dedicated to the Phoenician culture,

3. "Father and Son" (Solima 2018) created by the Tuo Museo for the Archaeological Museum of Naples.

4. "Beyond our lives" an adventure game by Tuo Museo to promote the first ancient Etruscan cities in Tuscany),

- simulations relating to past events, e.g.

"Difendiamo le Mura", it is based on the siege of the city of Paestum by Alexander Molossus, until recently was available within the city's archaeological museum.

- Adventure Games, e.g.

"A Night in The Forum" (Ferdani et al. 2020; Pescarin et al. 2020), a 3D video game for PlayStation VR, created by VRTRON in collaboration with the Italian CNR concerning the Roman market of the Augustan era.

Cf. also the following links:

<https://www.tandfonline.com/doi/abs/10.1080/09548963.2021.1910490>

<https://www.tuomuseo.it/la-gamification-per-il-turismo-culturale-della-lombardia/>

<https://www.art-usi.it/videogame-e-patrimonio-culturale-un-libro-francoangeli-open-access/>

https://www.researchgate.net/publication/49588460_Designing_Effective_Serious_Games_Opportunities_and_Challenges_for_Research

<https://www.tandfonline.com/doi/abs/10.1080/09548963.2021.1910490>

<https://edizionicafoscari.unive.it/it/edizioni4/riviste/magazen/2021/1/the-use-of-serious-games-as-an-educational-and-dis/>

https://www.academia.edu/49640635/The_Use_of_Serious_Games_as_an_Educational_and_Dissemination_Tool_for_Archaeological_Heritage_Potential_and_Challenges_for_the_Future

<https://edizionicafoscari.unive.it/it/edizioni/riviste/magazen/2021/1/the-use-of-serious-games-as-an-educational-and-dis/>

Spain

In recent years, particularly in Spain, several research projects have taken place. Ortiz-Colon et al. (2018) select and study a series of surveys in school and university institutions:

- The "Minecraft Edu." application. of Saéz and Domínguez (2014), with 41 student participants. They dedicated a large number of sessions, using the application for educational purposes, and the results were quite encouraging. Compared to students that followed a more traditional learning method, important interactive benefits were documented and captured.
- "Strategies for improving learning and competence acquisition in a university context" is another research project. The authors (Villatustre, Del Moral, 2015) propose a quantitative social simulation game with 161 university students who are asked to jointly develop an intervention plan capable of promoting sustainable development in a rural environment with missions, rules, challenges and points.
- "Competition as a mechanism of gamification in the classroom": the study developed by Cantador (2016) targets both healthy competition, cooperative learning, the mechanisms of gamification and the extent to which this methodology increases students' motivation.



An important application of the gamification methodology in a museum is that of the Museum of Prado. On the occasion of the exhibition "Gabinete de Descanso de sus Majestades", a virtual representation of room 39 in different time periods has been developed, which can be visited using mobile devices, computers and virtual reality glasses. In this gamification experience the user can approach the museography of the last two hundred years through Luis Eusebi, the first custodian of the Museo de Prado, who invites us to reflect on aspects and themes of cultural heritage, the history of the Museum and the history of Spain.

It is noteworthy that in recent years more and more postgraduate programmes on gamification and technology applications in education have been offered, such as "Máster en Juego, Gamificación y Tecnología aplicados a la Educación" from the Escuela de Nuevas Tecnologías Interactivas of the University of Barcelona (ENTI-UB). At the University of Burgos, Picón Ibañez Adrián's master's thesis (2019), "Ludificación y Gamificación en el aula de secundaria", was carried out. This work presents different practical proposals for gamification, which can be implemented in secondary schools.

As gamification is gaining ground in both academia and industry, as shown by the large number of publications in recent years, more and more conferences, workshops and webinars are being organised on this topic. As for example, the 5th International Symposium "Gamification and Learning Games (GamiLearn'21)", which took place in Barcelona (27-29 October 2021). There, various gamification approaches, strategies, tools, methodologies, innovations and studies in progress to encourage games in the educational process were presented.

The value of teaching cultural heritage is undeniable. However, interest in cultural heritage in education is not strong, as participation in cultural events is usually limited. Also, cultural heritage is usually taught in traditional settings, making learning unattractive. An attempt to change these facts is a gamification and cultural heritage project named *El Juego de la Alhama Medieval*. This game focuses on the interpretation, protection and dissemination of part of the valuable historical, artistic, cultural and natural heritage of Alhama in Granada. It is an important tool to approach the medieval past of the city in an educational way, as users can walk through towers and gates of the medieval city and complete their tour up to the citadel.

Cf. also the following links:

<https://www.museodelprado.es/recurso/experiencia-gamificada-de-la-sala-39/360332b6-adbe-fef0-480b-350c1fd8dff5>

<https://gamilearn.webs.ull.es/>

<https://axfitoculture.com/portfolio-item/proyecto-delimitacion-del-perimetro-amurallado-de-la-alhama-medieval/>

A thorough bibliography review on the positive impacts of gaming in learning, skill enhancement, and engagement settings has been presented by Connolly, Boyle, MacArthur, Hainey, and Boyle (2012). This paper examines the literature on computer games and serious games in regard to the potential positive impacts of gaming on users aged 14 years



or above, especially with respect to learning, skill enhancement and engagement. Search terms identified 129 papers reporting empirical evidence about the impacts and outcomes of computer games and serious games with respect to learning and engagement and a multidimensional approach to categorizing games was developed. The findings revealed that playing computer games is linked to a range of perceptual, cognitive, behavioural, affective and motivational impacts and outcomes. The most frequently occurring outcomes and impacts were knowledge acquisition/content understanding and affective and motivational outcomes. The range of indicators and measures used in the included papers are discussed, together with methodological limitations and recommendations for further work in this area.



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