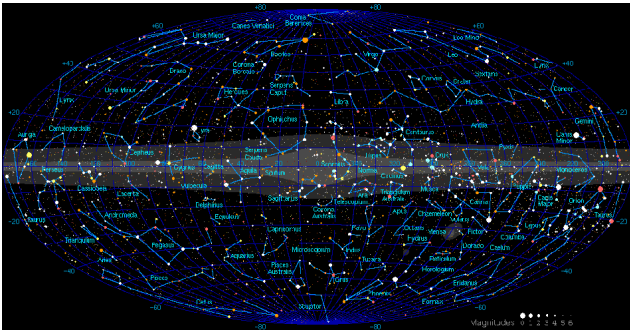


TITLE



Plotting constellations on a Cartesian plane

SUBJECTS

Science, Technology, Engineering, Art, Maths

CLASS



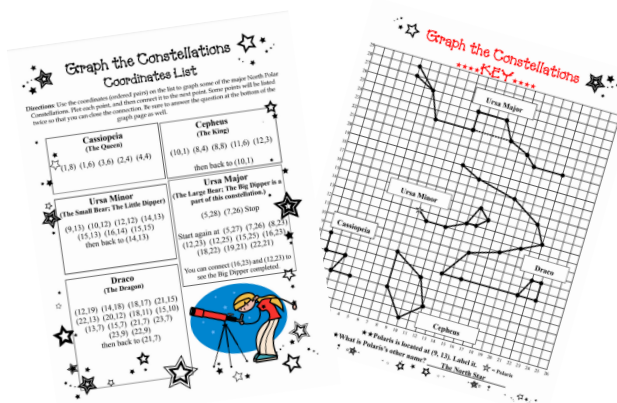
SECOND CLASS OF THE SECONDARY SCHOOL



DURATION

4 hours

MATERIALS

Papers to graph a cartesian plane or a graph paper, pencils, colored pencils, glittered glow, compass.
List of coordinate points only for each constellation to be plot;
List of constellations names for each set of points for future identification.



<p style="text-align: center;">OBJECTIVES</p>	<p>Students use a cartesian plane and plot the main constellations.</p> <p>Use the coordinates (ordered pairs) on the list to graph some of the major constellations. They recognize constellation by identifying shapes and giving them names. They plot location of star points and try to name the pictures ourselves. They learn to link a constellation to their own major star. They use ourselves creativity to decorate the products.</p> <ul style="list-style-type: none"> - Science: celestial bodies, stars, constellations - Technology: techniques of graphical representations - Engineering: groundwork to build tools for modelling different pattern - Art: different types of artistic products - Mathematics: Cartesian plane
<p style="text-align: center;">TOPICS</p> <div style="display: flex; justify-content: space-around;">   </div>	<p>In plotting constellations students need coordinates to put out in the Cartesian plane.</p> <p>They plot the main constellations such as Cassiopea, Orion, Cygnus, Chefeus, Ursa Major and Ursa minor. They plot each point, and then connect it to the next point.</p> <p>They use creativity to decorate their products using colored pencils or glittered glow.</p> <p>They can try to project them to the wall by using a torch. To do this they must make a hole on the point (that's constellations stars) that allows the light to go across.</p>
<p style="text-align: center;">ASSESSMENT</p>	<p>The assessment is focused on the ability of students to: integrate science topics with the aim of mathematical tools, explain science concepts such as the link between stars and constellations shapes and find a way to reproduce them in a small scale. By projecting them on the wall they model a little starry sky in the classroom.</p>