

21. Studying symmetry



XUNTA DE GALICIA

CONSELLERÍA DE CULTURA, EDUCACIÓN
E ORDENACIÓN UNIVERSITARIA



Title	Studying symmetry
Content/ Subject areas	Literature, Art, Geography, History, Language; foreign languages
Target group	Students year 1 Secondary.
Learning objectives / competences	<p>To learn all about Symmetry in the class of art</p> <p>To get knowledge about the Alhambra of Granada</p> <p>To use the literature round the Alhambra of Granada to introduce the topic</p> <p>Use the architecture of the Alhambra of Granada to explain the symmetry in art</p> <p>Valuing and respecting the different ways of seeing and representing art, own and others.</p> <p>Raise students' awareness of their role in the cognitive process undertaken.</p> <p>Adapt to unforeseen situations by taking risks.</p> <p>Maintain curiosity and interest in the research undertaken (own, of their colleagues, proposed by the teacher).</p> <p>To deepen the students' relationship with each other, with attitudes and contributions favorable to cooperation in research and creation work.</p> <p>To make the student aware of the aesthetic fact.</p>
Description of overall activity	<p>The teacher uses one of the tales of Washington Irving to talk about the monument and then presents the different buildings and gardens and what they were used for. In this way students get familiar with the Alhambra and its history. After they analyze type of symmetry we can find in the Alhambra which according to Marcus du Sautoy (Londres, 1965 "¿Is the palace of the symmetry!" <i>"The Alhambra is a microcosm of the whole problem of symmetry," "Symmetry is a concept that supports many things: in biology, for example, the H1N1 virus is a symmetric object and uses symmetry to replicate itself, in physics it serves to understand the behavior of elementary particles."</i> Laces, such as those found in the Alhambra in Granada or the Alcazar of Seville, are Arab mosaics whose motifs contain intertwined ribbons. Its beauty lies in the symmetry hidden in its mosaics</p> <p>The teacher will use the Alhambra history and art to engage students in learning Symmetry. They 'll get to know all about: Axial symmetry Central symmetry, and will be able to create their own Art works</p>
Description of the process and teaching/ learning strategies used	<p>Students get familiar with the art and story of the Alhambra by reading one or more of the Washington Irving. The teacher introduces the monument using the white board</p> <p>Students learn about symmetry and how to apply it to the art and they produce their own art works.</p>
Evaluation/ types of assessment	<p>We do formative assessment by asking students to present (individually) a Padlet with all concepts they learnt in the lesson</p> <p>We'll also do pair assessment one group assess other group after the presentation of their work and debate on it</p> <p>Teacher use the e-portfolio for assessment.</p>
Materials and tools	Whiteboard, notebook, Padlet, Annex Nr1.
Timing and learning environment	We' ll use 4 classes to do the activity , we can do it in the classroom if we have 1:1 in the classroom
Conclusion	<p>Students work different transversal skills: reading, creativity, decision making, apply previous knowledge, communication skills...</p> <p>It can be used at any school in worldwide</p>
Contacts	mtrigo@edu.xunta.es