

## **Science and Islam**

### **Art Lesson 1 – Creating an Islamic Pattern Tile.**

This could work as one long Art lesson or be split into two lessons to allow more time for students to create their tile and learn about aspects of Islam and Islamic Art. This lesson could also be adapted to be used in maths or R.E.

#### **Aims and objectives:**

Students should:

- Know and understand about major themes and practices in Islamic art.
- Know and understand vocabulary about Islamic art and pattern making.
- Should be able to construct a mosaic style pattern using squares and equilateral triangles.

#### **Resources:**

- **Islamic Art** *PowerPoint* provided.
- **How to make an Islamic Tile** *PowerPoint*.
- A base of card or stiff paper to create their pattern on.
- Coloured paper (see below), scissors, rulers and glue stick.
- Coloured squares and equilateral triangles (squares should be all one colour and use two different colours for the triangles). The sides of the squares and triangles must be the same length. Shapes can be made by using shape punches that punch out identical shapes; by photocopying grids of drawn squares and triangles onto coloured paper for students to cut out or by cutting into stiff card a square and equilateral triangle shape to act as a template that students can draw around inside of the shape (students can then either draw and colour in their shapes or draw onto coloured paper and cut out).

This task could be done in any size with students working individually, in pairs or in small groups. A larger piece could be created to tile a wall and involve different thicknesses of card to create a relief in some areas or using fabric to give the pattern a tactile quality. Alternatively the task could be done on a small scale in sketchbooks. Once templates are cut they can be used to repeat this activity.

#### **Lesson content:**

- Begin the lesson by briefly looking at and discussing with your students the *PowerPoint* on **Islamic Art**. If students are new to Islam you may also wish to show them the **Science, technology and design in Medieval Islam** *PowerPoint* (see resources for the Introductory Lesson)
- Give resources out to students; they need a base for their pattern and either pre-cut triangle and square shapes or a way of creating accurate shapes e.g. a template. Students also need rulers, scissors, and glue.

- Students should begin by dividing their tile base into quarters accurately so that they have a centre point to work from.
- Each step is now demonstrated on the **How to make an Islamic Tile** *PowerPoint*. Using a white board each stage can be displayed whilst the students work or the *PowerPoint* can be printed out for students to work from at their desks.

### **Homework or extension tasks:**

- See what other patterns can be made from just using equilateral triangles and squares.
- Look for examples of Islamic pattern in books or on the internet.

### **Further reading and resources:**

Islamic Patterns (an infinite design colouring book) – Bourgoin, J.  
ISBN 0 486 23537 8

Islamic Patterns (an analytical and cosmological approach) – Critchlow, K.  
ISBN 0 500 27071 6

Geometric Patterns from Islamic Art and Architecture – Field, R.  
ISBN 1 899618 22 8

Introducing Islam – Sadar, Z. & Malik, Z.  
ISBN 1 840465 824.

Down load a resource on Geometric Patterns from:  
[www.projects.ex.ac.uk/trol/trol/trolna.pdf](http://www.projects.ex.ac.uk/trol/trol/trolna.pdf)