



## Shapes and Patterns Home Information Sheet

### First Level (b)



*MTH 1-16a I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary.*

*MTH 1-16b I can explore and discuss how and why different shapes fit together and create a tiling pattern with them.*

*MTH 1-13a I can continue and devise more involved repeating patterns or designs, using a variety of media.*

### Over the next few weeks we are going to be learning to:

- Identify and name 2D shapes and 3D objects
- Appreciate that 2D shapes may be regular or irregular
- Sort and classify a range of 2D shapes and 3D objects
- Know vocabulary associated with 2D shapes and 3D objects (e.g. corner, side, angle, face, edge, straight, curved)
- Investigate whether a shape tiles or not
- Explain why different shapes can or cannot tile
- Investigate tiling patterns which use more than one shape
- Be able to copy, continue and describe patterns involving more than one object, shape or colour
- Use a variety of media to create their own more complex patterns, e.g. collage, printing, mosaic tiles etc
- Explain the rules they have used or observed

### Here are some ideas of how you can help me at home!

**Properties of objects** Tell children to find some examples of 3D objects at home and to record their findings (writing or labelling drawings). They should think about why the object is the shape it is. Back in class, they tell their group about the objects, for example, An ice-cream cone is an example of a cone. It has a curved face and you can see a circle when you look at the open end. The shape of the cone makes it easy to hold and the open end means the ice-cream sits in it without falling.

**2D pictures** Ask children to choose any scene, imagined or real. They draw it using just two kinds of shape, for example, circles and squares or triangles and rectangles.

**Shapes on the way to school** Ask children to think about their journey between home and school. Tell them to list five objects they pass on the way. They record (writing or drawing) the 2D shapes that are in the 3D objects.

**Tile shapes** Ask children to find parts of their home that show tiling patterns (e.g.

roof slates, bathroom floors, etc.). They draw and label the shapes they spot.

Here are some websites that you may find useful to use with me!

**Pattern Matching** - <http://www.ezschool.com/Games/PatternMatching.html>

**Shape Lab (Hard)** -

<http://www.bbc.co.uk/bitesize/ks1/maths/shapes/play/popup.shtml>

