**Activity 1: Maths within the Church**

**Collection Areas:** St Peters Church, number 4 on the map.

**Curriculum Links:**

* ***Mathematics and Statistics:*** Geometry and Measurement.
* ***The Arts****:* Understanding the Arts in Context, Developing Ideas.

**Topics/Themes:** Geometry and Measurement, Architecture.

**Resources Pack:** Clipboards, paper, pencils, rubbers, sharpeners, Questions for Viewing, Guide for Teachers/Helpers

**Time estimation:** 10-15mins

**Goals**

Students will be able to:

* Recognise and find shapes and transformations within the church.
* Record geometric patterns by translating, reflecting and rotating.
* Build familiarity in terms of pattern and shape vocabulary.
* Learn to identify geometric patterns in real-life contexts.
* Explain in their own language where the line of symmetry is on a shape.
* Describe the process of making shapes with line symmetry.

**Guide for teachers/helpers. What to do at this activity:**

1. Look around the church, encouraging students to notice the shapes they see.
2. Facilitate group discussions with the ‘questions for viewing’ which are laminated for you in the resource box.
3. Using a pencil and paper, students are to make a collection of drawings of the different shapes and examples of transformations they can see within the church. If the weather permits, encourage students to sit outside the church and discuss the shapes on the outside of the building. Encourage students to practice their counting and number knowledge, and time-telling using the clock on top of the church.
4. Students are to save their findings (make sure these are named) and take them back to their school classroom for later use (see the post-visit classroom activity).
5. Please ensure all items (other than the pieces of paper) are returned into the resource box.

**Questions for viewing:**

* Take a moment to look closely at the church. What symmetrical patterns can you see?
* What tessellations, rotations, reflections, or enlargements can you find? Where is the line of symmetry on these shapes?
* How are mathematics and art linked?
* Picture the inside of your classroom or house, what differences can you notice? What do you notice about the different shapes, structure and design?
* How does the design of this building make you feel?
* Why do you think buildings can be different shapes?

**Post Visit Classroom Activity:** Make a stained glass window artwork.

**Materials:** Pencils, colouring pencils, rulers, paper

**Curriculum Links:**

* ***Mathematics and Statistics:*** Geometry and Measurement - Transformation.
* ***The Arts****:* Understanding the Arts in Context, Developing Ideas.

While visiting the church, students will make a collection of shapes and examples of transformations they find and record this on a piece of paper. On returning to the classroom, teachers can use this as a platform for naming and discussing the attributes of shapes. This could be an opportunity for a unit of work on transformation. Students will make their own stain glass window using the shapes and transformations they observed in the Founders church. Students will need to show the use of transformations within their stain glass window.