

This activity can be used after a visit to Emirates Spinnaker Tower and over a number of sessions.

## CURRICULUM LINKS

**ENGLISH** – Pupils can write clearly, accurately and coherently, adapting language and style in and for a range of contexts, purposes and audiences.

**MATHS** – Pupils can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

**MATHS** - Interpret and construct pie charts and line graphs and use these to solve problems.

## LEARNING OBJECTIVES

To interpret data to create bar and line graphs.

## RESOURCES

For this activity you will need:

- › Dictionaries
- › A3 paper
- › Rulers
- › Tower data sheet
- › Interactive Whiteboard
- › Graph Paper
- › Art materials including coloured pencils, pens, paper, glue

## STARTER

- › Ask the children to remember their visit to Emirates Spinnaker Tower by paired talking for 2 minutes. Ask them to remember as much as they can about the visit – how tall was the Tower? How did it feel going up in the lift? How did they feel when they walked over the glass floor? What was their favourite part of the visit?
- › Ask the children to share their most vivid memory with the class.

## MAIN TEACHING

- › Explain to the children that they will be continuing to research tall towers around the world.
- › Explain to the children that they will be given a list of towers from around the world and explain that they need to use the information about the towers to create a graph. Decide whether the children should use a bar graph or a line graph, depending on their age and ability. Use the supplied datasheet for this activity.
- › If necessary, show them how to draw graphs to ensure children remember titles, clearly labelled axes, a key etc.
- › Once children have the data, ask them to devise a colour code for the bars so that towers built at different times are clearly recognisable, for example, towers built in the 1950s may be coloured red, 1960s blue, etc.
- › When children finish their graphs, ask lots of questions about them altogether as a class, such as 'Which is the highest tower ever built?', 'Which was the tallest tower built in the 1970s?'. You may wish to use terms such as 'average', 'median' and 'range' when discussing the data and graphs.

## EXTENSION ACTIVITY

See overleaf →

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### CURRICULUM LINKS

**MATHS** – Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate

**MATHS** - Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to 3 decimal places

**MATHS** - Convert between miles and kilometres

### LEARNING OBJECTIVE

To choose appropriate units of measure for length.

### RESOURCES REQUIRED

- Towers data sheet
- Rulers
- Graph Paper

## TEACHER NOTES

- Ask the children to convert the measurements of the towers into different units of measurement.
  - Kilometres
  - Metres
  - Centimetres
  - Millimetres
- Now children should represent the measurements of the towers in fractions, up to 3 decimal places.
  - 1 km = 1000 m
  - 1 m = 100 cm
  - 1 cm = 10 mm
- What is the most appropriate unit of measurement for:
  - A tower
  - A playground
  - A classroom
  - A desk
  - A pencil
  - A fingernail
- Ask the children to give a real-life, practical reason why they think different ways of showing measurements is important.