Guidelines for the use of Creating graphs from Severn Bore statistics

Activity title: Creating graphs from Severn Bore statistics
Curriculum area: Maths
NC objectives: Maths: Ma2 1a), 1c), 1e), 2a) Ma4 1c), 1f), 2b), 2c), 2e)
Main learning objective: Using data to produce a bar graph and form questions form the data

Lesson plan ideas, activities and resource sheets

INTRODUCTION: 10 minutes

- Introduce the lesson by explaining that they are going to be studying some statistics to form in to a graph to show the data more visually.
- Look at some of the data and ask a few mental questions for addition, subtraction, multiplication or division, eg, 'how much bigger was the bore on xx xxxxx than on xx xxxx'? Discuss methods of working.

MAIN ACTIVITY: 40 minutes

- Provide the class with the '2.4a Creating a bar graph from Severn Bore statistics' worksheet to complete individually. Focus on the data and discuss what it represents, eg, number of bore watchers, size of the bore, number of bore surfers etc.
- Begin by selecting the data to be looked at and then help the class determine the step size of the graph depending on the maximum number and the number of steps on the 'y' axis. Try to lead the class to the fact that they must use division to work out the step size, eg, maximum number is 200 with 10 steps, so the intervals should be 20. The class can count up in different numbers until they reach the correct interval.

PLENARY: 10 minutes

- Go through the graphs to ensure they are completed accurately using 2.4b Answers to creating a bar graph from Severn bore statistics and then ask some questions about the data. Discuss the quickest way to come to the answers – using the graph or the table of results?
- The class can form their own questions about the data and swap with a partner to answer them

Suggested extension activities or cross curricular links:

- Complete the bar graph activity using other data, such as tide heights at Sharpness.
- Complete bar graphs to compare activity of individuals or groups of pupils in class, i.e. number playing football at break or number playing tag, etc