

Primary School Worksheets Maths at the Boat Show

Aim of the worksheets

To give purpose to a visit to the Boat Show by using task sheets that will develop skills in researching and data handling interpreting and presentation. The sheets can be used just at the show or as a starting or mid-point of a larger project covering key curriculum areas

Focus of show activities from Key Stage Two Maths Programmes of Study

Ma4 Handling data

Processing, representing and interpreting data

- a. *solve problems involving data*
- b. *interpret tables, lists and charts used in everyday life; construct and interpret frequency tables, including tables for grouped discrete data*
- c. *represent and interpret discrete data using graphs and diagrams, including pictograms, bar charts and line graphs, then interpret a wider range of graphs and diagrams, using ICT where appropriate*
- d. *know that mode is a measure of average and that range is a measure of spread, and to use both ideas to describe data sets*
- e.
- f. *draw conclusions from statistics and graphs and recognise when information is presented in a misleading way; explore doubt and certainty and develop an understanding of probability through classroom situations; discuss events using a vocabulary that includes the words 'equally likely', 'fair', 'unfair', 'certain'.*

Ma3 Shape, space and measures

Understanding measures

- e. *find perimeters of simple shapes; find areas of rectangles using the formula, understanding its connection to counting squares and how it extends this approach; calculate the perimeter and area of shapes composed of rectangles*

The Worksheets

1 – To work out areas and perimeters

2 - For pupils to work in groups to gather information from the show enabling them to compare types of boat and present information using hand or ICT skills.

3- To convert units of measure from one system to another



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Stand Shapes and Sizes

The exhibitors at the boat show have all done a lot of planning before they arrive at the show.

One of the main things they have to decide is how much area they need to show their products and services to the show visitors.

There are two main types of stand

1 Floor space where the exhibitor builds a special stand that is tailored to their needs,

2 Shell stand where the walls are already there and are usually set out in a regular square or rectangular shape

Your task is to find five different shapes and styles of stand and then work out their area!

Here is how to do it

Find your chosen stand and using even paces count how many paces wide and long they are.

For a round stand walk around the perimeter

Fill in the table with your results

School Task

When back at school measure the length of your pace and then you can convert this into a dimension that can be understood by other people. Remember your pace will not be as accurate as a measuring tape so when you work out the size in metres you will have to round it up or down to the nearest whole metre.

Stand Name	Width in paces	Length in paces	Circular stand Perimeter	Length of my pace
Super Sails Inc	6.5	13		55cm
Silent Motors Ltd			60	

Stand Size in metres *Silent Motors Ltd*

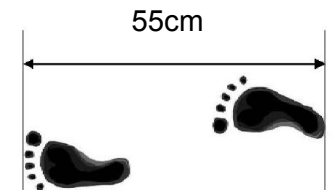
Perimeter $60 \times 55 = 3300 = 33$ metres

Stand Size in metres *Super Sails*

Width $6.5 \times 55 = 357.5$ or about 4metres
 Length $13 \times 55 = 715$ or about 7 metres
 Area = length x width = $4 \times 7 = 28\text{m}^2$



Measuring your 'pace' size



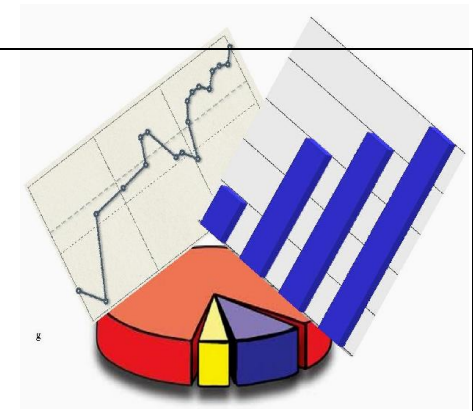
Different Boats

Boat Show task

You can find nearly every sort of boat you could imagine at the Boat Show

Your task is to collect data on as many different types of boat as you can

Remember to take some photographs of both yourselves and the different stands



Type of boat	Length	Draft	Weight	Hull Material	Where it is made	Cost	Other Information
Laser sailing dingy	4.064	1.15	150kg	Polyethylene	Laser boats are made all over the World	Laser Bahia £5916	

School Task

Presenting the data in graphs and charts

You can process your information manually or by using ICT skills

Produce a display of your day at the Boat Show with data to compare different boat types, just like you would find in a 'comparison' website

For each category decide what will be the best way of showing the information: Pie chart, Histogram, Line graph etc

