Maps and Coordinates Home Information Sheet

Second Level (b)

Through practical activities which include the use of technology, I have developed my understanding of the link between compass points and angles and can describe, follow and record directions, routes and journeys using appropriate vocabulary.

MTH 2-17c

I can use my knowledge of the coordinate system to plot and describe the location of a point on a grid.

NMU 2-18a

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

- Demonstrate the relationship between compass points and angles, using practical examples and through the use of technology where appropriate, e.g. Super Logo, Roamer
- Use appropriate vocabulary to communicate a route or journey to others, e.g. third turn to the left, turn through 90º clockwise, north-east etc.
- Give directions using an 8-point compass rose
- Understand the terms origin, *x*-axis, *y*-axis, axes, *x*-coordinate, *y*-coordinate and use them correctly in discussions
- Correctly state the coordinates of a point, appreciating that the numbers are written in brackets, *x*-coordinate first, separated by a comma
- Plot a point on a coordinate diagram
- Plot and join points in the correct order to produce shapes/patterns/pictures

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

Home Mapping: Ask child to draw a 'top-down' view of the rooms in your house. Where would the doors and furniture be? What size should they be on the map?

Treasure Map: Ask child to draw an island (top down view) on squared paper. Ask them to number each line along the bottom edge (zero in the left corner) and up the left edge (from that same zero). Draw some 'treasures' and other features on the map and ask child to identify their positions. Start along the horizontal line (x) then up the vertical line (y) and write the coordinate as: (x, y).

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

http://www2.smarttutor.com/player/swf/Geometry_Coordinate_L5_V1_t3a.swf Park the car - This grid activity will set your graph reading skills on track.

http://nrich.maths.org/1279 - Coordinate Cunning- Combines '4 in a row' with knowledge of origin and coordinates

Challenge me!

Battleships! Draw a 10x10 grid. On your map, you need to mark 7 boats… two boats with 2 spots, 2 boats with 3 spots, 2 boats with 4 spots and a 5-spot boat. The spots in each boat can only be horizontal or vertical (NOT diagonal), and must be placed on the grid-lines. Decide who is starting. Try to guess where your enemy's boats are, by asking them for a co-ordinate. If it hits one of your boats' spots, draw a cross on that spot, and you get another guess… if it's a miss, draw a circle there and your enemy has a turn to guess where your boats are hidden. Keep playing by taking turns until there is a winner – the one who sinks all SEVEN boats.