



Maps and Coordinates Home Information Sheet

Second Level (a)



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 90° clockwise, north-east etc.
- Give directions using an 8-point compass rose
- Follow and record routes and journeys using the link between compass points and angles Understand how the Cartesian coordinate system works, i.e. numbers on lines, points on intersection of lines
- 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

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

Compass Mnemonic: Try and think of ways to remember to points on a compass- the crazier the better! e.g. Naughty Elephants Squirt Water

Where would you like to go? Do you have an atlas or a globe at home? Ask children to draw a detailed map of a country they would love to visit. Ask them to locate the country's capital city and record any important features (think about what natural resources the capitals have access to).

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

<http://nrich.maths.org/5038> - Position the letters according to the given clues (combines knowledge of symmetry)

<http://resources.oswego.org/games/BillyBug/bugcoord.html> - Billy Bug and his grid reference quest for grub.

Challenge me!

Coordinates: Here are the coordinates of some quadrilaterals but in each case one coordinate is missing!

1. $(2,11), (0,9), (2,7), (?,?)$
2. $(3,7), (3,4), (8,4), (?,?)$
3. $(18,3), (16,5), (12,5), (?,?)$
4. $(13,12), (15,14), (12,17), (?,?)$
5. $(7,14), (6,11), (7,8), (?,?)$

The quadrilaterals are all symmetrical. This may be rotational or line symmetry or both. Can you work out what the missing coordinates are if you know they are all positive? (Hint: draw a 20 by 20 grid and plot them out) Is there more than one way to find out?

