

Learning Intention: *How can you use co-ordinates on a map?*

I can understand co-ordinates and can describe a point on a map.

I can find a point on a map from its co-ordinates.

I can give co-ordinates to describe a point on a map.

NOTE: Before the lesson, the teacher to place the puzzle pieces in different locations around the school grounds. You will also need a map of your school with a grid. Note: You can use the grid overlay - **Resource card 7-** (on a word document, click wrap text tight, for it to overlay)

EQUIPMENT:

Cones

Maps of school

Labels with names of places in school.

Signs

Post-it notes

WARM UP: Work it out! Teacher to put children into groups of 3/4

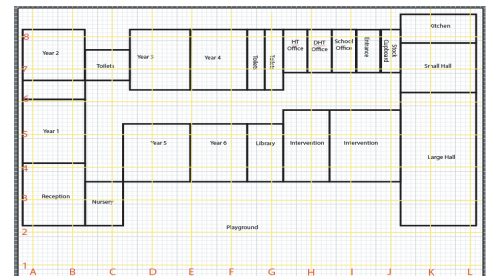
Children to skip around in an area. As soon as the teacher calls a maths question, the children are to create the answer using their bodies. E.g. $6 \times 8 = 48$ – the children are to make the 4 and the 8 with their bodies, either by lying on the floor or standing.

ACTIVITY 1: Read the map

Recap what co-ordinates are and how to use them.

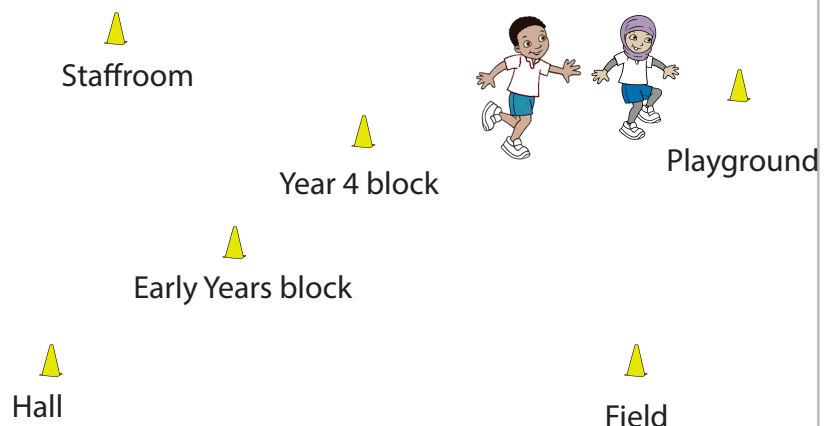
Put the children into pairs and give each pair a map of the school with a co-ordinate grid overlaid, an example of this can be seen in **Resource 1**).

Stick the names of different places around school on cones and scatter the cones around the playground/field. (**See resource card 2**)



The teacher should call out co-ordinates for the children to find on the map. Once the children know which place (cone) the co-ordinate is referring to, they should skip to that cone. The activity can be repeated until the children are more confident in using co-ordinates with a map.

Make it harder: Both axis can be labelled with numbers so that children have to remember to read the co-ordinates in the correct order (x,y).



TIP: To remember the order of coordinates:
Follow the corridor (horizontal)
then, go up the stairs (vertical)

ACTIVITY 2: Piece the Puzzle!

Teacher set up:

1. Before the lesson, the teacher/TA will need to stick the puzzle pieces showing 4 different sports (**Resources 3- 6**) in different locations around the school grounds.
2. Create a school map with co-ordinates - see created grid overlay, (**See resource 8**) which can be used on a word document (ensure you click wrap text tight, for it to overlay)
- 2.. The co-ordinates of the location of each puzzle piece will need to be recorded on **Resource 7**.

Piece the Puzzle (Children to get into pairs)...

1. Children will need a map of the school with co-ordinates included
2. Give the pairs the list of co-ordinates (**Resource 6**) of where they will be able to find the pieces of the sporting puzzles.
3. Once they have found all 8 pieces, they should complete the puzzle and identify the sport that is displayed.
4. Once all children have completed a puzzle, they can be given a new set of co-ordinates to find the pieces of a different puzzle.

An example puzzle for badminton:



Note: If you do not have time to put out the pieces, write the co-ordinates - ask a group of children to place the pieces out. Then the other group will go and find them - while also double checking that the co-ordinates are correct!

ACTIVITY 3: Challenge

Children can create their own list of co-ordinates and challenges their peers to stick post-it notes at the location of the co-ordinates. They could use pictures or words.

PLENARY

Plenary: *Why is having the co-ordinate more helpful than just the place name?*