

# 101

**ATMS**  
EDUCATION

## FUN AND EASY ACTIVITIES

with

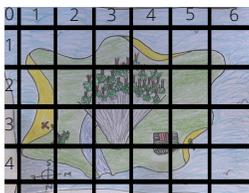
## CO-ORDINATES

You will need:

- masking tape
- small objects e.g. lego bricks
- paper
- pencils and pens

### Activity - Find the treasure (2 or more players).

1. Draw a treasure map on a piece of paper then, using a felt tip or writing pen, draw a grid over the top.



2. Label along the top of each column and down the left side of each row with numbers starting from 0.

3. One person now needs to write down a co-ordinate e.g. (1,4) for where the treasure is hidden and keep it to themselves. The other person has to now find the other player's treasure by stating a co-ordinate. If the player guesses wrong, the play moves on to the next player and continues on until a player guesses the correct co-ordinate. The winner then writes down a new co-ordinate for where they have re-hidden the treasure. Play on in this way until one player is lucky enough to discover 3 treasure chests.

### Activity - Shape Co-ordinates

1. Create a grid on the floor that is 10 columns along and 10 rows down using masking tape - as in the photograph above.
2. Using paper and a pencil, make 2 sets of number labels from 0-10 and label as in the photograph.
3. Now see if you can plot the following shapes to find out what they are:

**Shape 1: (0,0) (0,4) (4,0) (4,4)**

**Shape 2: (1,1) (1, 5) (6,1)**

**Shape 3: (4,4) (4,10) (6,4) (6.10)**

4. Now can you plot and write down the co-ordinates of your own shapes?

## INFORMATION FOR PARENTS

### Things to remember

1. When plotting points, always go along then up or down e.g. (4,3) would mean 4 along and then 3 down on the treasure map.
2. The part of the grid where the labels go is know as the axis. The horizontal axis is called the **X axis** and the vertical axis is called the **Y axis**.
3. Co-ordinates are written in the following format (number from x axis, number from y axis) e.g. (3,6).

The find the treasure game is a great way to introduce co-ordinates to younger children. The activity can be linked with our Story Ninja activity 'Treasure Hunt Story Planner' to support your child's creativity and to develop learning within a context. Children in Key Stage 1 are expected to learn about position, direction and movement within mathematics. In order to develop this, you could ask them to describe a journey on a map in order to get to their treasure e.g. Start at (1,1)- facing the island - then move 2 squares forwards, turn a quarter turn left and move 3 squares forwards, Turn a half turn left and move 1 square forwards - you are now at the treasure. Not only will this support maths development but it will also help to develop their speaking skills.

Children in Key Stage 2 may be able to plot points on a grid. At the end of this key stage, children should be able to plot given points and then be able to draw lines to join plot points on a grid. Within Key Stage 2, children are expected to learn about shapes and their properties. The second activity can help to consolidate their learning in this area. To extend their learning, you could give your child a shape with a missing co-ordinate and ask them to find the missing coordinate by plotting the ones they know and then using their knowledge of the shape's properties.

### Vocabulary

co-ordinates, shapes, plot, x axis, y axis, properties, angles, edges, problem solve.