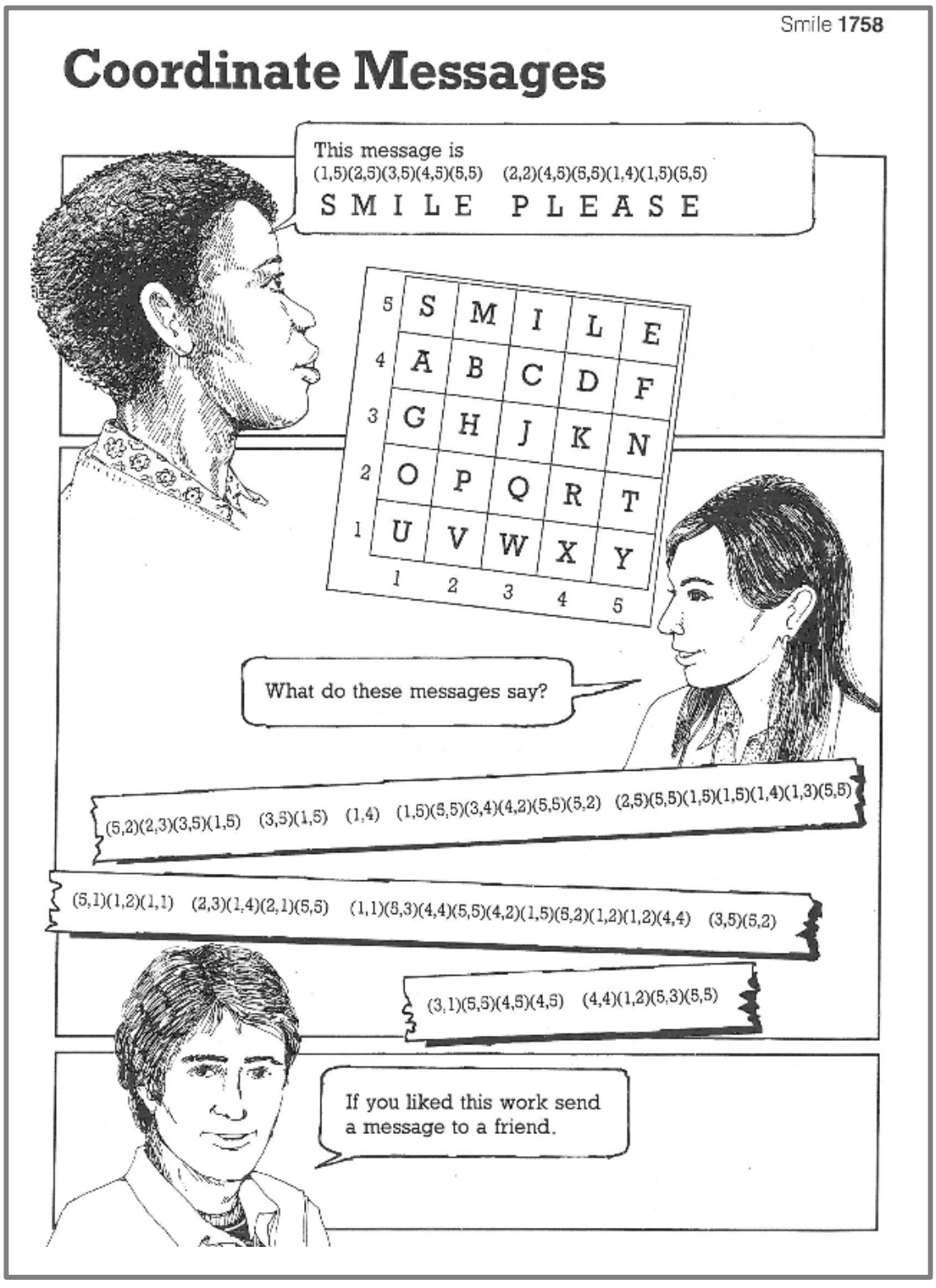
Coordinates part 1

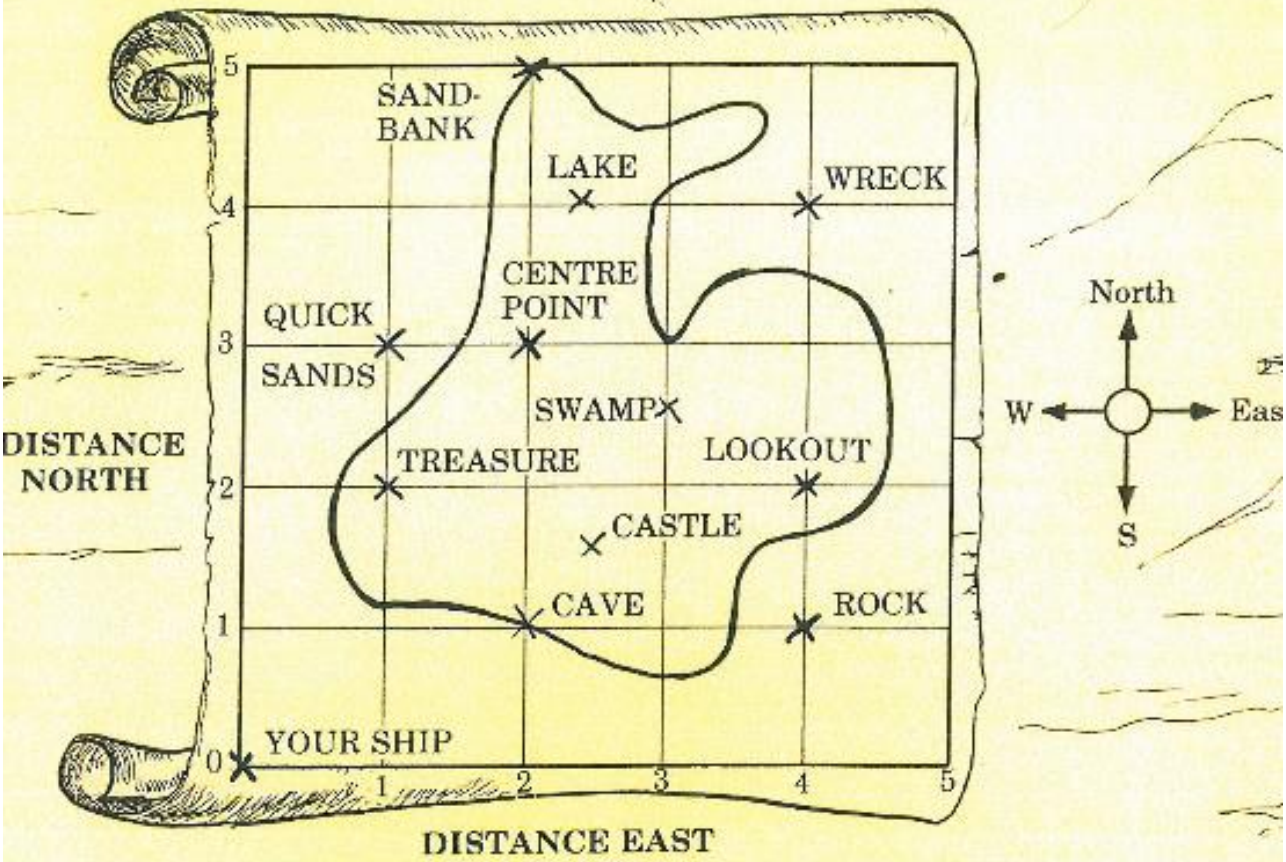
Whether you are a parent, teacher or home school educator, we've compiled examples of activities, games and puzzles which can be used to support the learning of shape and space.

These examples are taken from the 'Coordinates' packs found in our SMILE resource collection. The mathematical demand increases as you work through the packs. There are lots more ideas in the complete packs, which can be downloaded at https://www.stem.org.uk/rxzf6

Answers to cards can be found at https://www.stem.org.uk/rxxo5



Co-ordinates



Find the ship on the map.
Move 2 east, and then 1 north.
You should be at the CAVE.
The position of the CAVE is: (2, 1)

Distance East — Distance North

(1) Copy and complete
The cave is at (2, 1)
The ROCK is at (4,■)
The WRECK is at (■,■)
The TREASURE is at (■,■)

(2) a) What is at (2, 5)?
b) What is at (2, 1)?
c) What is at (1, 2)?
d) What is at (4, 2)?

(3) a) What is at (3, 2½)?
b) What is at (2½, 4)?
c) What is the position of the castle?

(4) If you enjoy making up maps draw one of your own.
Write down the positions of all the places you mark.

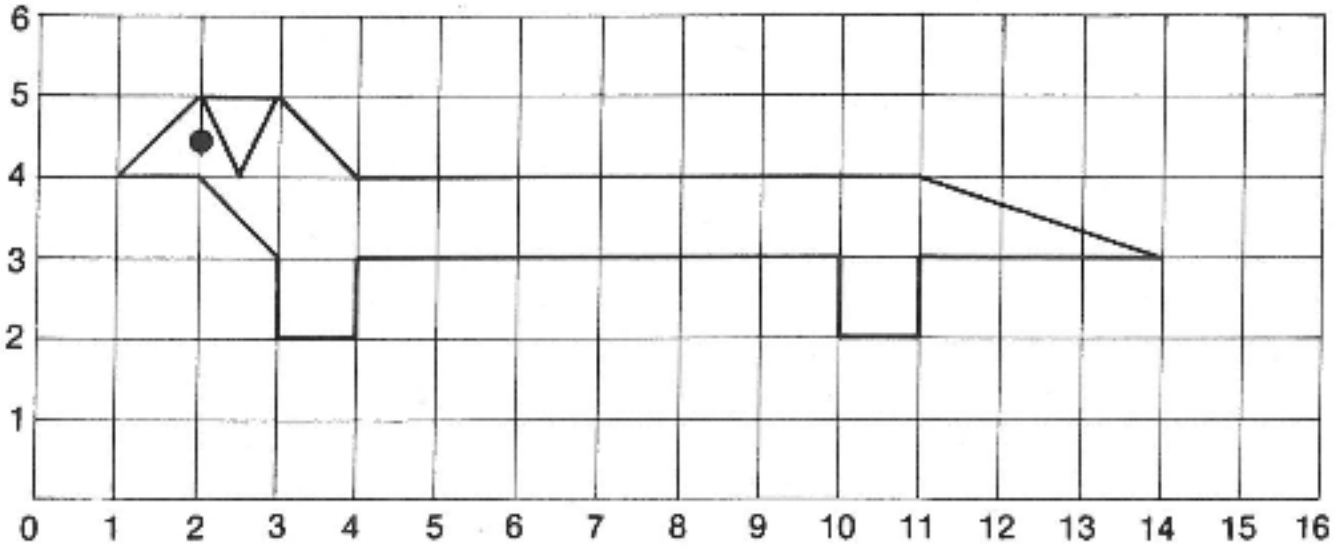
Remember:
Always start at the ship (0, 0)
The first number is the Distance East
The second number is the Distance North

You will need cm squared paper.

Smile **0263**

Co-ordinates 3

Here is a picture of Sammy the sausage dog. Draw a grid on cm squared paper and copy Sammy exactly on to it.



1) What are the co-ordinates of:-

(a) Sammy's nose
(b) the end of his tail
(c) his eye
(d) the bottom of his ear?

2) Draw a new grid and number the lines across and up from 0 to 10. In each question below plot the points and join them as you go.

(a) (1, 1) (3, 1) (2, 3) and back to (1,1)

(b) (5, 1) (6, 2) (5, 3) (4, 2) and back to (5,1)

(c) (7, 1) (9, 1) (7, 3) and back to (7, 1)

(d) (1, 4) (3, 4) (3, 6) (1, 6) and back to (1, 4)

(e) (4, 6) (7, 6) (8, 8) and back to (4, 6)

Write down the names of the shapes you have drawn.

You will need tracing paper

Fishing

A fisherman starts at the port (0, 0) and wants to navigate safely to his fishing grounds (15, 0).

He must always be more than one square away from any rock and he must stay on the grid lines.

1. Use tracing paper to find the fisherman's route.

2. Write your answer using co-ordinates.
(0,0) → (0,6) → (■,■) →