

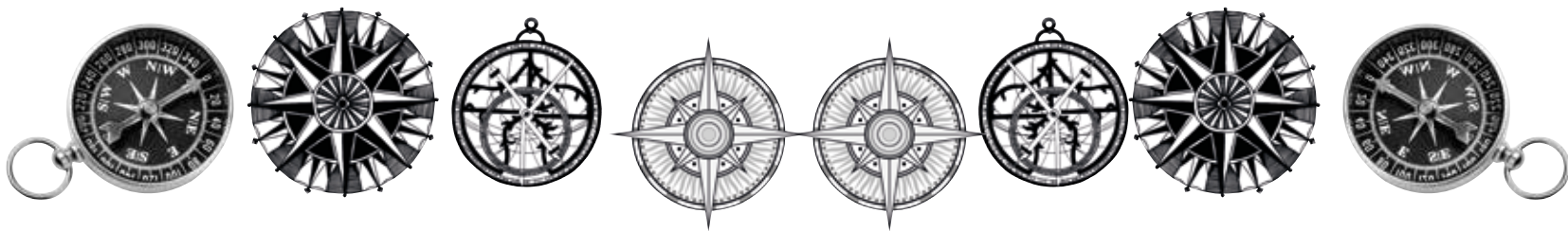
PLACE AND DIRECTION

**... HOW TO GET AROUND ...
AND THE JOURNEYS TO GET YOU THERE**

**Packed with challenges featuring:
direction, travel, compass points, grids, contour lines,
co-ordinates, latitude and longitude, GPS, bird's-eye views,
map reading, map symbols – and much more**

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WHICH WAY?

Ancient people used to judge direction by following the movement of the Sun and stars across the sky. Later the compass was invented. Using a compass is more complicated than tracking the path of the Sun. It's also more accurate! There are 16 useful directions in all. These are exactly in-between each of the four main directions: N, S, E and W.

USING A COMPASS

The directions are marked on a compass to help you find which direction you are travelling in.

The 4 main directions are:

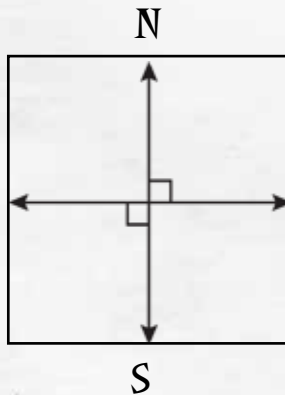
NORTH or N

SOUTH or S

EAST or E

WEST or W

There's a right angle between each direction.



A compass shows all the points to guide your direction.



A way of remembering the points of the compass moving clockwise is the phrase:

'Naughty Elephants Squirt Water'

FROM A TO B

On a flat surface, the shortest distance between two points is along the straight line between them. Lines taking any other route are longer.

AS THE CROW FLIES

This expression is used to describe the shortest distance between two points. It's as if we imagine a crow flying from place to place without having to dodge any obstacles.

Crows are a strange choice for this expression, however, as they usually fly in large curved paths and not straight ones!



The next set of important directions between the main compass points are;

NORTH EAST	or	NE
SOUTH EAST	or	SE
SOUTH WEST	or	SW
NORTH WEST	or	NW

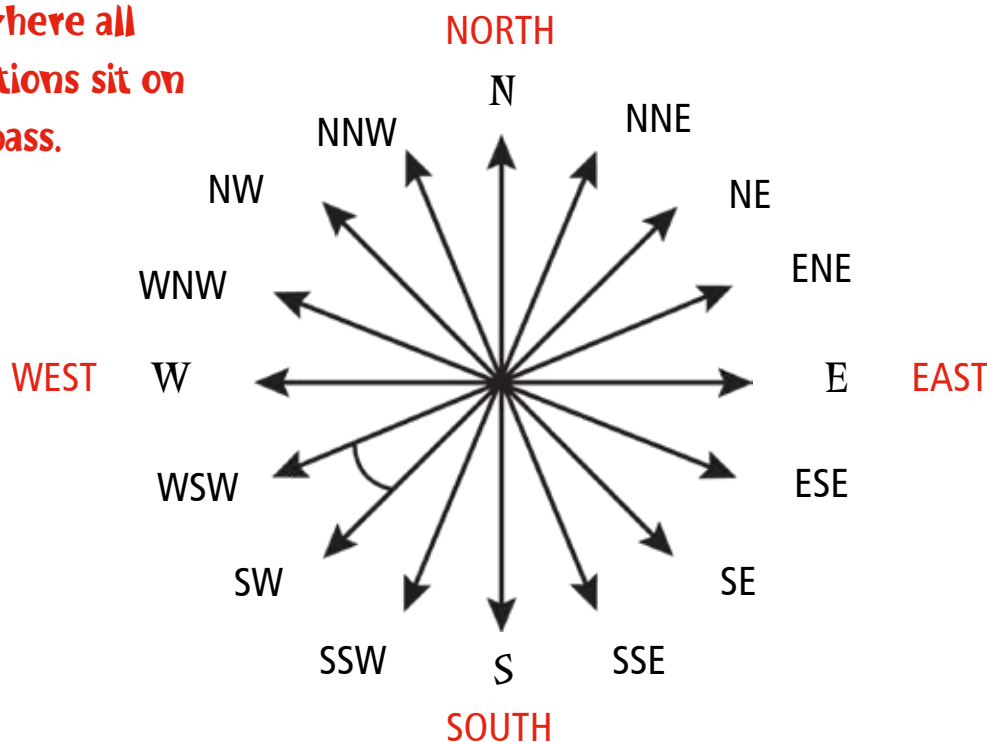
And finally, there is a set of directions that lie exactly halfway in-between these.

NORTH NORTH EAST	or	NNE
EAST NORTH EAST	or	ENE
EAST SOUTH EAST	or	ESE
SOUTH SOUTH EAST	or	SSE
SOUTH SOUTH WEST	or	SSW
WEST SOUTH WEST	or	WSW
WEST NORTH WEST	or	WNW
NORTH NORTH WEST	or	NNW



**No compass?
DON'T PANIC!**
**The Sun rises towards
the EAST and sets
towards the WEST**

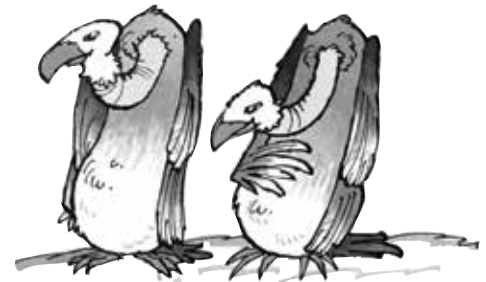
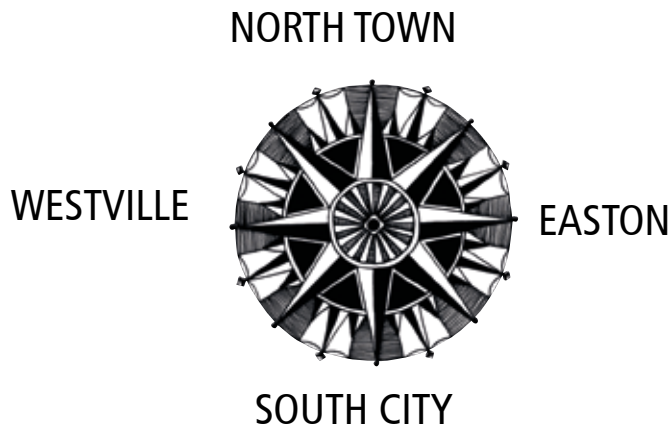
**This is where all
the directions sit on
the compass.**



WHERE AM I?

Depending on where you are, different places or things are in different directions.

Can you fill in the missing directions below?



If you are in South City, North Town is to the north, Westville is to the north-west and Easton is to the north-east.

1. If you are North Town, South City is to the ____, Easton is to the ____ - ____ and Westville is to the ____ - ____

2. If you are at Westville though, North Town is to the ____ - ____, South City is to the ____ - ____ and Easton is ____



THE ASTROLABE

The astrolabe is a very ancient astronomical 'computer'. It was used by early astronomers and mathematicians to help solve problems relating to time, as well as the position of the Sun and stars in the sky. Astrolabes are used to show how the sky looks at a specific place at a given time.

Answers on page 32