

Science Worksheet – Level 1-4

“This Place”

This place is the place where you are now – the room, the school, the street, the locality.

Imagine being a complete stranger, in your hands is a map of This Place.

What does it show? How can you tell which places to go to for different reasons? How can you tell the best ways of getting from place to place?

The answer is by looking at the map – that is what maps are for.

But there is no map.

So your task is to produce a map of This Place.

STEP ONE:

- Define the area that you are going to map
- Decide what should appear on the map – you will need to both plot the position and note the nature of all features that you decide to include – these might be
 - Trees
 - Paths
 - Buildings (including possible reference to special type, such as school hospital, shop)
 - Roads & associated infrastructure (traffic lights, roundabouts)
 - Any special features or landmarks

STEP TWO:

- Decide how you are going to measure the distances involved. You should consider:
 - Do you need to measure ALL distances – for example, the length of the path and also the *width* of the path?
 - How accurate do your measurements need to be – will you need a proper measuring device, or will counting the number of strides do?
- If it is a group exercise decide on the job – you will need:
 - Someone to step out the measurements
 - Someone to write down the measurements
 - Someone to note any special features that should be on the map
- If you are mapping a larger area – perhaps a whole block or extensive school grounds for instance you can divide the space between yourselves, or between teams
- If you divide the space and are going to utilise number of strides for measurements, how can you be sure that all stride lengths are approximately the same?

STEP THREE:

- Make all of the necessary measurements and compile your initial sketch plan
- You can improve your sketch plan by referring to – and perhaps tracing from – existing maps or plans of the area or even aerial photographs if these are available

Now it is time to make a map.

STEP FOUR

Transfer all the notes, sketches and distances to graph or grid paper, agreeing on a scale – if, for example, one square is equal to one (or two, or five depending on the size of the area covered) strides, then you transfer to the gridded paper at the ratio. In this way you transfer the data collected “in the field” to paper in an approximately scaled way.

But so far what you have drawn-up is a layout plan. You show where the main physical features are, the main buildings and the thoroughfares.

But think about what you, as a visitor, might want to know from a map.

It is time now to design ICONS.

An ICON is a symbol that represents something, on your map there will be a KEY where the icon is matched to a description of what it stands for. In this way you can put quite a lot of information on the map without taking up a lot of space. For example, if you decide that a cross (+) can represent a church you are using one character, the cross, instead of the six letters that make up the word.

First, what features do you think are important to the visitor?

Certain types of building have been mentioned (hospital, school, shop, perhaps police station). What about good vantage points where the visitor could get a view of the town. Perhaps specific vantage points (“good place to watch the sun set”). Or even warnings against the less attractive things in your locality – the tip, a factory, a bad traffic spot. There might be interesting plants – particular trees, a park, a well-known local garden. There might be animals, both wild and domestic (do you need an icon that says “beware of the dog”?).

STEP FIVE

You have drawn-up your map on gridded paper. Using notes made during the measuring stage you can now add icons as you have decided, to give the visitor an idea of the things that you think are important about your place. There is one last step: make sure everything you have put on the map has a name, so that the visitor can ask about it. If a name already exists of course you can use it – but what about the icons you invented for all the places you thought important. Do they stand for places with names?

If not then you have to choose names and place them on your map.

Not just any name of course, but a name that has a good reason for being attached to the place or feature that you have given it to.

Perhaps you want to finish your map by colouring it – if so, you could make colours part of the key and have colours representing different types of area or feature.

And lastly, if you think the map has turned out particularly well, you might want to mount it so that it doesn't tear easily.

If several groups have been involved then you should compare your maps, the places you have chosen to feature, icons designed and names chosen, and try to agree on a map that takes the best from everyone and is consolidated into one class version of This Place – the place where you live.