What is the safest way to walk / cycle to school? Safer routes mapping lesson

Activity 2

Numeracy

USING MEASURING SKILLS

Which LNF outcomes?

Using measuring skills
Angle and position

Year 5
- Use coordinates to specify location.

Year 6
- Use grid references to specify location.

Developing numerical reasoning
Identify processes and connections

Years 5 and 6
- Transfer mathematical skills to a variety of contexts and everyday situations.

Activity ideas

What is the safest way to walk / cycle to school? – Safer routes mapping lesson.

- Look at large scale maps of your locality (e.g. you can use an internet mapping site such as google maps, or contact your local authority for local area maps). Identify your school and an example pupils' house.
- Give out maps and ask pupils to identify their houses and the school using grid coordinates. Ask them to note the grid coordinates of their houses and the school.
- Pupils mark their route to school.
- What are the hazards on their journey? Is there a safer way they could travel?
- Mark the new route on the map.
- Do the same for other routes – to friends' houses, to the shops, to the park, etc.
- Reflect on why some routes are safer, and on the benefits of active travel.

An example lesson is provided for this activity

This activity works well with:

Activity 3 – How far do you travel to school?
Activity 4 – How many steps do you take on your way to school?
Activity 5 – How long does it take you to travel to school?

Subject links

Geography
PSE

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What is the safest way to walk / cycle to school? Safer routes mapping lesson

Lesson Plan | KS2 | Numeracy

Learning Objectives: LNF Expectations

Strand: Using measuring skills

Element: Angle and position

Year 5:

- Use coordinates to specify location.

Year 6:

- Use grid references to specify location.

Strand: Developing numerical reasoning

Element: Identify processes and connections

Years 5 and 6:

- Transfer mathematical skills to a variety of contexts and everyday situations.

Learning Outcomes

1. Pupils can use a map to locate place and plot routes.
2. Pupils think about different modes of travel and their advantages and disadvantages.
3. This activity provides the opportunity to **use and apply** numeracy skills relating to measurement, scale and coordinates**.** Pupils will become more familiar with their local area and learn to identify safe routes to use when travelling to school.

Geography Locating places, environments and patterns.

Lesson Outline

Resources

- PowerPoint presentation on maps entitled ‘Safer Routes Presentation’ (either available on CD or as a download from www.sustrans.org.uk/schoolresources)
- A3 printouts of catchment map from local council

It may be beneficial to run this lesson at around the same time as the provision of National Standard Cycle Training for pupils in Year 5 or 6 so they have a safe route where they can put into practice the on-road skills they learn.

Engage

Show a map on an interactive whiteboard (you could use Google Maps or get a map from your local authority, e.g. Cardiff Cycle Map). Show the area around your school, zoomed in as much as possible. Ask '*Where is this?'* Gradually zoom out until pupils identify the location.

- Locate your school and some of the pupils' homes on the map.
- Look at the Safer Routes Presentation (either available on CD or as a download from www.sustrans.org.uk/schoolresources).

Develop

Organise pupils into pairs. Distribute maps of the local area – give time for pupils to orientate themselves with the map. Find NSEW, the scale, map features, coordinates. Recall how to use coordinates.

Task 1: Find local landmarks, features and places on the map. Describe their position using **coordinates**. Choose places familiar to children. Start with the school.

Ask pupils: *What is a route?* It's a way of getting from A to B. *Are there different ways to get from A to B?* Explain that planning a safe route means thinking about different ways to get to a location. In pairs, pupils list features of a safer route and then feedback to class. Add the list to the whiteboard to refer to later.

Task 2: In pairs, look at the maps. Ask pupils to find where they live and mark it in colour. Repeat with the school. Ask pupils to plot the route they use to travel from their house to school.

Task 3: Pupils identify hazards that may occur along their route. Can they plan a safer route (refer to the safer routes features list to check it is a safer route). This could be repeated for other routes, e.g. routes to a friend's house or to the park.

Reflect

Look at the routes pupils have come up with. Highlight good features, referring to the features on the safer routes list. Which routes are better for cycling? Why are cycling and walking preferable to car use?

Extension

You could include measuring distance in this lesson by using the technique employed in Activity 3 (using string to measure distance and working out the total distance by using the map's scale).

Home Learning

Ask pupils to look at the map with their parents / carers and try out the new route.