

Digimap for Schools

What is the quickest way to school

Investigating different routes to school

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Geography teaching resource

Primary



This is one of a series of teaching resources for use with Digimap for Schools. For more details about this service, visit <http://digimapforschools.edina.ac.uk>

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Digimap for Schools Geography Resources

Title: What is the quickest ways to school

Level	Context	Location
Primary	Investigating alternative routes to school	Home location

Knowledge	Plotting simple routes. Using measuring tools. Recognising simple map features. Beginning to use a key.
Curriculum links (England)	Study the geography of the school and the key human and physical features of its surrounding environment.
Curriculum links (Wales)	Knowledge and Understanding of the World: Learn about distance and how to follow directions and routes.
Scottish Curriculum for Excellence	Social Studies Outcomes: People, Place and Environment: 0-07a, 1-07a, 1-14a,

Activity

Investigating different routes to school and why and how some routes are shorter than others. Pupils can mark out and approximately measure their routes to school.

Introduction

All pupils have experience of getting to school using different routes and methods of transport. *Digimap for Schools* allows these routes to be measured and plotted, helping children to make connections between distance and type of travel and to begin to recognise patterns in the landscape.

Some useful questions to explore before starting the activity:

- How do you get to school and why do you travel in this way?
- How long does it take you to get to school?
- How far do you think your journey is?
- What do you see along the way?
- Do you always use the same route?
- What route would you take if you were a bird and could fly straight to school?

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Main activity

Pupils will imagine that they are a bird and able to fly directly to school in a straight line from their house 'as the crow flies'. Pupils draw a line joining their home and school, then measure and record how far this is.

They then plot a line to school from home by following the route that they usually take, and measure this. Then they will compare the two.

Tasks

1. Open *Digimap for Schools* and help pupils find a map that shows both their home and school. They should zoom in as far as they can without losing sight of these two places (Make the map fill

the screen by using ) Put a pin marker  at each location

2. Open the *Annotations toolbar*. Select the colour and style of line you want to use and the colour font and size of text you want to use. (The default line option is solid purple which shows up well. The text size default is 36 and you may find 26 a better size)

3. Now draw a line using . Click on the house to start and drag the line straight to the school. Double click to finish.

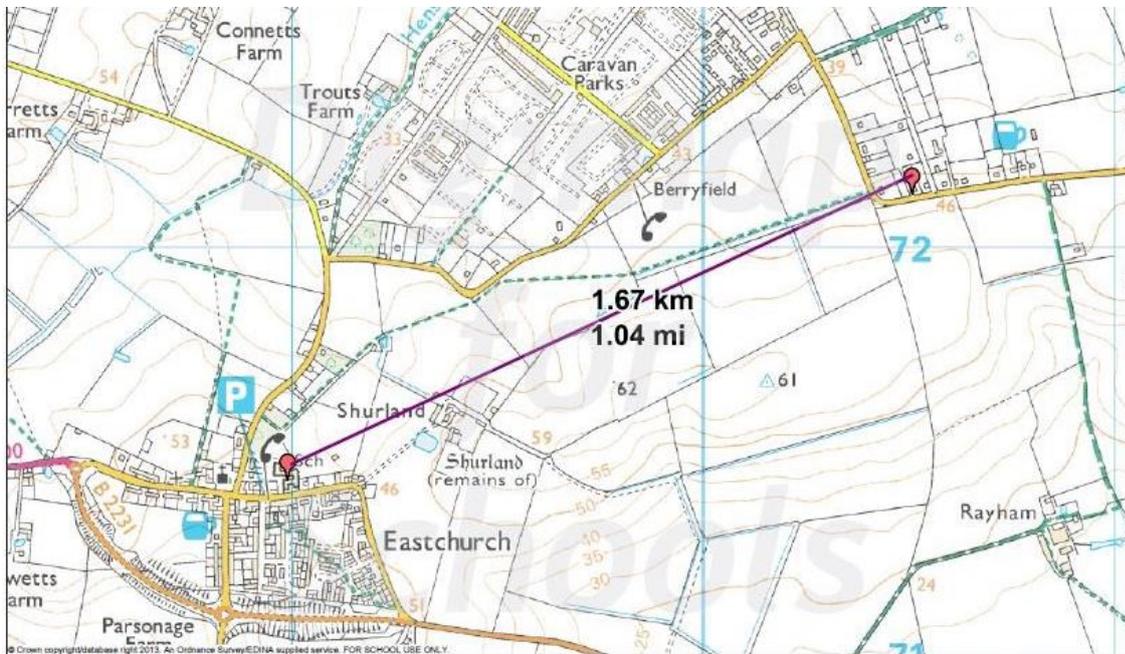
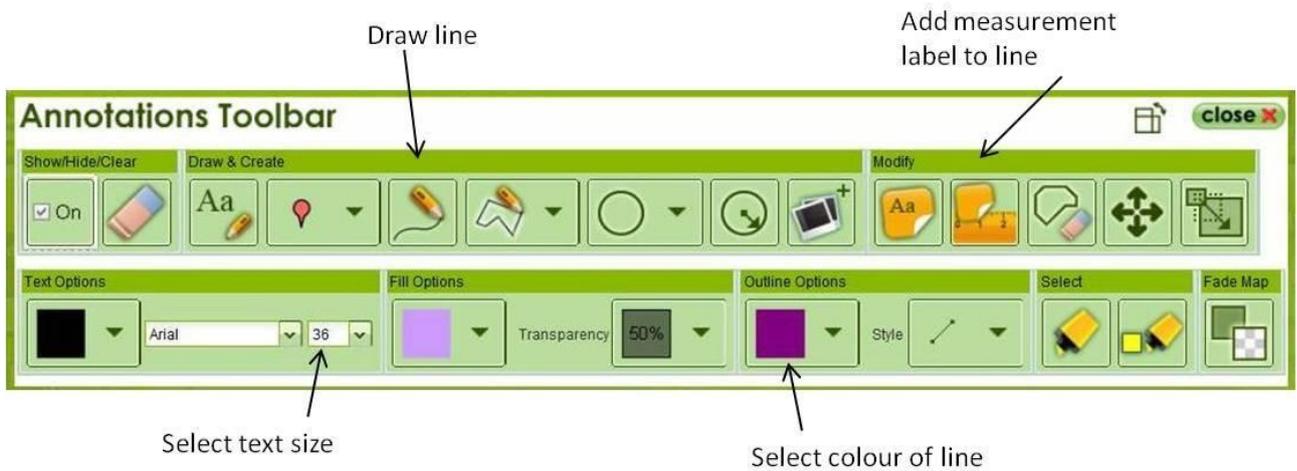
4. Select  and the line you wish to measure. The result will be offered in km or miles and then displayed on your line. You can move the measurement to a convenient position by selecting

 and the item you want to move. Use the 'Fade map' icon to make the measurement show up more clearly.



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5. Now pupils will find their actual route to school. Repeat the process as before but this time, select a different colour and line-style before you begin. As the line is drawn, click each time you change direction. Or, you could hold down the 'Shift' key to draw in freehand mode. Double click to finish.
6. Open the measurement tool as before and select this route to measure it. Calculate the difference between the two distances.

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7. Finally, add some labels using , remembering to choose the text, font and colour of the writing before placing the label. Labels might include.

- My house
- Name of school
- As the crow flies
- My route to school

8. Discuss how and why the two distances are different, thinking about features in the landscape, especially barriers and boundaries.

- Why can't you go directly to school by travelling in a straight line?
- Why can't roads always follow the quickest route?
- Why can't we even walk to some places in a straight line?

Use the maps to discuss features you pass on your way to school on the usual route and what extra things you might see if you could fly in a straight line. Use the map key to help identify some of these.

Taking it further

- Create a class resource showing how many pupils live within various distances of the school.

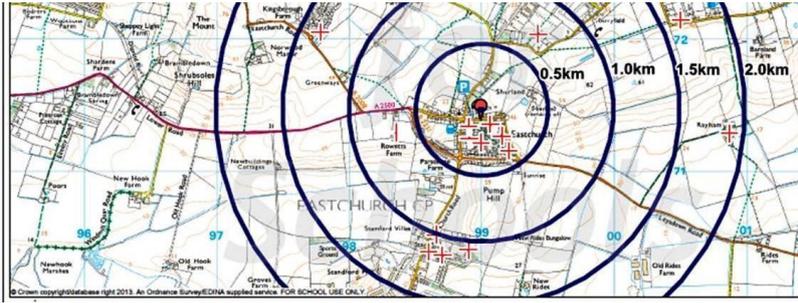
First, select an outline colour that will show up well (such as dark blue) and a solid line style in medium or thick. Make sure the transparency is set to 100%.



Using this tool, draw buffers at 0.5, 1 km and 2 km (or more) around your school. You will need to zoom out to see the rings. You could also add labels to the buffers to show their distance from school. Ask every pupil to add a marker indicating where they live. Discuss the results with the class.

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- Write a story from a bird's eye perspective about a journey to school taking the direct route.
- Search the map to find examples of places that are very close together 'as the crow flies' but which are separated by long distances because of features in the landscape such as water; for example: Minehead and Cardiff. Discuss why bridges are so important.
- Investigate the safest routes to school for walkers. Decide how you can encourage parents to car-share or walk instead of driving.
- Look at aerial views of your route to school. What time of year were the photos taken? How can you tell?
- Look at the 1890s map of your route to school. How would you get to school when there were no cars?

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