

Where will you View the Olympic Torch Relay?

Task A

Plan: Is there a relationship between the crow flight distance and the road distance for the journey to view the Olympic Torch Relay in the area where I live?

- Will you use primary or secondary data?
- What data do you need to collect?

Collect: Road and crow flight distances together with time to travel by road and other variables can be captured by the Getting to the Point Tool.

In box 'Your Start Point' enter your home post code or address followed by UK, in 'Olympic Torch Viewing Point' use the drop down menu to choose where you would like to visit the Olympic Torch Relay then Click '**Get to the point**'. (You may have to click '**Get to the point**' twice.)

Be patient GeoCoding can take time. If there is an error simply refresh the page.

The resultant map shows the crow flight distance, the road distance and the time it would take by the road route to make the journey between the two locations.

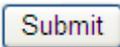
If you wish to change the Olympic Torch Viewing Point then choose another location from the drop down menu and click '**Get to the point**'. 

Once the map appears you may zoom in/out and move the marker to get a more accurate reading or change your route. You can also pan (move from side to side) the map by dragging it, just 'click and hold'.

Once you are happy with where the two icons are, complete the rest of the survey.

Your LEA code is ... your school code is ...

(Ask your teacher for these if they are not on the worksheet.)

When you have answered all the questions press submit. 

A thank you message should appear.

Write down the two distances and the time to make the road journey. Close the webpage.





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Collect: Use your data that will be given to you by your teacher.

Process: Plot a **scatter plot** of road distance against crow flight distance.

1. Is there a correlation between road distance and crow flight distance?
2. If so is the correlation positive or negative?
3. Explain what this means.
4. Do the data points appear to be linear (in a straight line)?
5. Draw a line of best fit on the scatter plot.
6. Is there much scatter about the line?
7. Where is the most scatter about this line?
8. Are there any outliers or points you would like to investigate further?
9. Use your line to estimate the road distance for a crow flight distance of 35 miles?
10. Why is this estimate?
11. Explain why it would be unwise to use the line of best fit to predict a road distance for a crow flight distance of 100 miles.

Discuss: Is there a relationship between the crow flight distance and the road distance for the journey to view the Olympic Torch Relay in the area where I live?

Task B

Plan If you were planning a trip to view the Olympic Torch Relay could you estimate the time it would take to drive there?

Collect: Use the spreadsheet from Task A. Decide on the variables (i.e. crow flight distance, road distance and time) that you need to use.

Process: Plot a **scatter plot** of the two variables you have chosen to investigate and follow the process in Task A.

Discuss:

If you were planning a trip to view the Olympic Torch Relay could you estimate the time it would take to drive there?

What other variables might you have to consider so you get to the location where you would like to view the Olympic Torch in plenty of time (e.g. time of day, day of week)?