

Lesson 2: Graphs

I'm a
Scientist
Decipher my data!



Cross Curricular Links

Science, Mathematics, Environmental studies



Key Vocabulary

axis - x axis, y axis

origin

categories

variable - control variable, independent variable, dependent variable

average - mean, mode, median



Learning Objectives

- Solve problems by interpreting information from graphs
- Identify trends, patterns and relationships in context
- Evaluate statements made about data
- Connect graphs to data found in the 'real world'
- Draw conclusions and identify further questions to ask



Key Questions

Materials Required:

- Access to Decipher My Data - Energy website
- Data Journeys - <http://energy.deciphermydata.org.uk/lessonplans/>

Intro:

- Where do we see graphs every day? - Newspapers, magazines, advertising, books, test etc
- Like a book we can 'read' a graph. How do we read a graph? Just like a book we must understand the language of a graph so what must we look for? – Graph Title, labels on x and y axis, scales categories.

Main:

- What does the graph show? – relate to the skills of 'reading' the graph.
- Can you see any patterns in the data? – Are there clusters of data?
- Do you see similar things happen each day?
- Are there any anomalies? – Peaks, troughs, unusual data.
- Does the information make sense? How does the information shown, fit with what we know already? – Days the school is open, after school activities, holidays etc.
- What could be the cause of the (peak /trough) shown?
- How do we determine which type of graph would be best to display particular data?
- Introduce your key question for the unit.

Plenary:

- With a partner write one question you have based on the graph data we have looked at today.
- What have we found out about graphs and how to read them?
- What do we now know makes a good graph?
- Give one sentence that explains what we have found out today?
- Where are we and what are our next steps?