

Unit: 3.7 Simulation

Key Learning

- To consider what simulations are.
- To explore a simulation.
- To analyse and evaluate a simulation.

Key Vocabulary

Simulation

A computer simulation is a program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

Key Resources



Key Questions

What is a computer simulation?

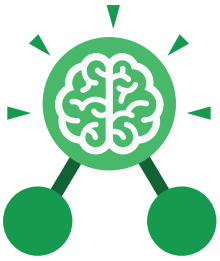
A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

What kind of simulations are there?

Some simulations represent dangerous situations for training such as flying in space, carrying out medical operations or piloting an aeroplane. Others simulate activities for fun, such as racing simulations.

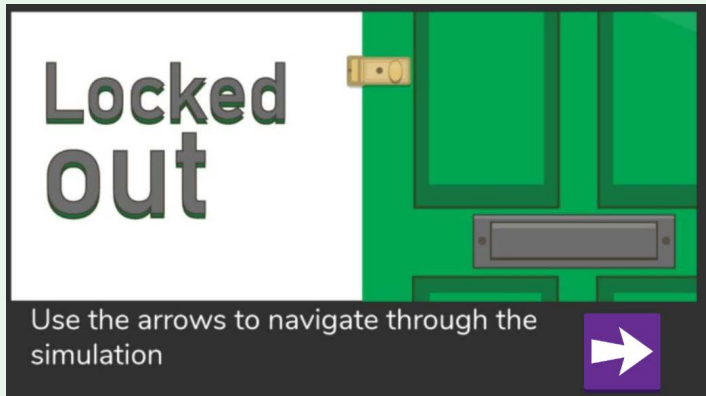
Are there any problems with simulations?

Simulations are often too simple; and unexpected problems can still occur in real life that are difficult to simulate. Simulations can also be very expensive.



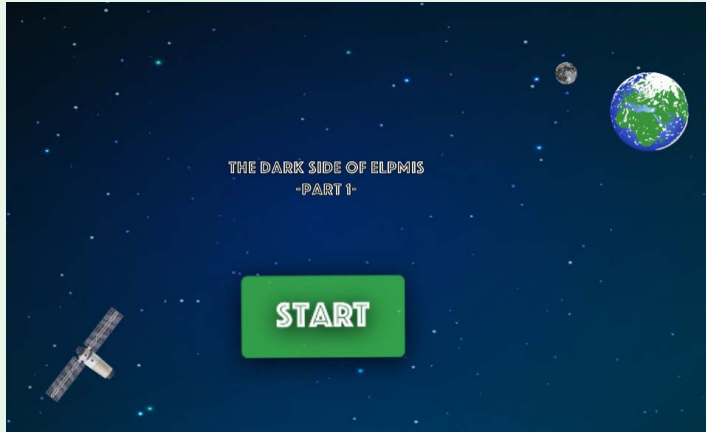
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Key Images



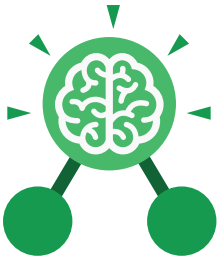
Locked Out

A lively dog causes problems for Mariza, her baby brother Sam and her mum.



The Dark Side of Elpmis

Trainee astronauts get ready for a mission to the planet Elpmis.

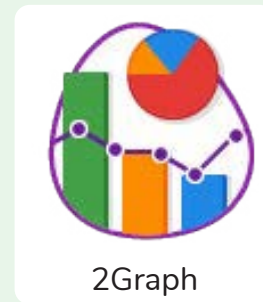


Unit: 3.8 Graphing

Key Learning

- To enter data into a graph and answer questions.
- To solve an investigation and present the results in graphic form.

Key Resources



Key Vocabulary

Graph

A diagram showing the value of objects.

Field

A part of a record.

Data

Facts and statistics collected together for reference

Bar chart

A graph in which the numerical amounts are shown by the height or length of lines or rectangles of equal width.

Block graph

A graph where a block represents one item.

Line graph

A graph where a line is used to show an amount.

Pie chart

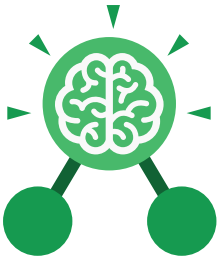
A type of graph in which a circle is divided into sections that each represent a part of the whole.

Row

A horizontal line of entries in a table or graph.

Column

A vertical line of entries in a table or graph.



Unit: 3.8 Graphing

Key Images

Chart Title 

Insert the name of the graph here.



Add and remove a row from the table.



Vertical Bar Chart



Horizontal Bar Chart



Block Graph



Line Graph



Pie Chart

Item	Number
Total	0

Data entry table

Key Questions

What is a graph?

A diagram representing part of a set of data. Graphs can be drawn by hand or on the computer. There are different types of graphs.

What are the frame lines on the graph called?

They are the axes. The axis that goes up and down (vertical) is called the 'y' axis and usually shows the amount. The axis that goes across (horizontal) is called the 'x' axis and shows what is being measured.

What different kinds of graphs are there?

There are lots of different types of graphs including line graph, bar chart and pie chart.