



















Animals Including Humans: Life Expectancy

<p>Aim: To record data and results of increasing complexity using bar and line graphs, and models in the context of comparing gestation periods and life expectancies of animals.</p> <p>I can record complex data using graphs and models.</p> <p>To report and present findings from enquiries, including causal relationships by analysing data on gestation periods and life expectancies of animals.</p> <p>I can identify the relationship between variables.</p>	<p>Success Criteria: I can create bar and line graphs to record data. I can suggest the best way to record complex data.</p> <p>I can compare two datasets. I can analyse findings. I can demonstrate I understand the different relationships between variables.</p>	<p>Resources: Lesson Pack Squared paper Computers or Tablet with appropriate graphing software (Excel, Google Sheets, Numbers, Graphs iOS app)</p>
	<p>Key/New Words: Life expectancy, gestation, animals, variable, association, causal relationship, correlation, positive, negative.</p>	<p>Preparation: Recording Datasets Activity Sheets - 1 per group Reporting Findings Activity Sheets - 1 per child Life Expectancy of Animals Table - as required</p>

Prior Learning: Children will have learnt about gestational periods in lesson 5.

Learning Sequence

	<p>Gestation Periods: What is a gestation period? What have you learnt about gestation periods so far? Show the gestation periods table. Children feed back about any patterns they have spotted in the gestation periods of different animals.</p>	
	<p>Life Expectancy: What is life expectancy? Children discuss with talk partner and feed back to the whole class to create a definition. Read the following statement to the children: 'animals with longer life expectancies have longer gestation periods'. Children discuss what information they would need to answer this question and how they would record their data. Talk partners to pair up to discuss and refine ideas further.</p>	
	<p>Variable Datasets: Place children into ability groups of 3 or 4. Give them the differentiated Recording Datasets Activity Sheets.</p> <div>  Groups given the differentiated Life Expectancy of Animals Table as well as / or instead of using textbooks or the Internet depending on reading ability.  Groups given the differentiated Life Expectancy of Animals Table to check accuracy of information they have found. </div>	
	<p>Graphing Two Datasets: Read questions that children should ask themselves when selecting a type of graph.</p>	
	<p>Vertical Bar Graph Horizontal Bar Graph Line Graph Mixed Bar and Line Graph</p> <p>Show each graph type in turn. Children discuss the pros and cons of presenting data in that format. Refer back to questions in Graphing Two Datasets.</p>	
	<p>Presenting Data: Groups discuss and decide which is most appropriate before graphing their datasets on computers / tablets or squared paper.</p>	
	<p>Analysing Data: Read through the information on the Lesson Presentation describing how to analyse data. Correlations and Causal Relationships: Read and explain definitions of different types of relationships between datasets. Children given time to ask questions to clarify their understanding.</p>	
	<p>Reporting Findings: Using the differentiated Reporting Findings Activity Sheets, children analyse their graphs and establish the kind of relationship there is between gestation periods and life expectancy.</p>	

Taskit

ScratchQuizit: Children to create an end of unit quiz on Scratch based on their learning from the **Year 4 Scratch Questions and Quizzes unit**.

Quizit: Children complete either a paper based or Scratch end of unit quiz.