

# Data Handling : Mathematics : Year 4

|                 | Learning Objective   | Overview  | Assessment Questions  | Resources   |
|-----------------|--|---|---|---|
| <b>Lesson 1</b> | To be able to answer a question by identifying what data to collect.         | Children will consider the need to provide a set of answers when collecting data to be presented using graphs and charts. They will then either plan for collecting data using tallies or collect and present data using a tally. | <ul style="list-style-type: none"> <li>• Can the children pose simple questions about data collection?</li> <li>• Can they suggest ways of collecting data?</li> <li>• Can they interpret the data they collect?</li> </ul> | <ul style="list-style-type: none"> <li>• Slides</li> <li>• Worksheet 1A/1B/1C/1D</li> <li>• Dice (FSD? activity only)</li> </ul>  |
| <b>Lesson 2</b> | To be able to use data to create a bar graph and interpret the information.  | Children will interpret data presented in tables and in bar charts, then either ask and answer questions about data in bar charts, or conduct a traffic survey.   | <ul style="list-style-type: none"> <li>• Can the children interpret a bar graph?</li> <li>• Can they present a bar graph?</li> <li>• Can they construct a bar graph?</li> </ul>   | <ul style="list-style-type: none"> <li>• Slides</li> <li>• Worksheet 2A/2B/2C/2D/2E</li> <li>• Graph paper</li> </ul>   |
| <b>Lesson 3</b> | To be able to choose the correct scale for the vertical axis in a bar graph. | Children will learn how to choose an appropriate scale for a bar chart, then draw bar charts with an appropriate scale on which to plot sets of data.   | <ul style="list-style-type: none"> <li>• Can the children interpret a bar graph?</li> <li>• Can they present a bar graph?</li> <li>• Can they construct a bar graph?</li> </ul>   | <ul style="list-style-type: none"> <li>• Slides</li> <li>• Worksheet 3A/3B/3C</li> <li>• Graph paper</li> <li>• Challenge Cards (FSD? activity only)</li> </ul>   |
| <b>Lesson 4</b> | To be able to use Venn diagrams to sort data and objects.                    | Children will learn how to use and read Venn diagrams with one intersection, then sort numbers or shapes according to two criteria using Venn diagrams.   | <ul style="list-style-type: none"> <li>• Do children understand what Venn diagrams are and how they are used?</li> <li>• Can they sort by two criteria?</li> <li>• Can they sort by three criteria?</li> </ul>              | <ul style="list-style-type: none"> <li>• Slides</li> <li>• Mini whiteboards</li> <li>• Worksheet 4A/4B/4C</li> <li>• Skipping ropes or similar (FSD? activity only)</li> <li>• Criteria Cards (FSD? activity only)</li> </ul>     |
| <b>Lesson 5</b> | To be able to use Carroll diagrams to sort data and objects.                 | Children will learn how to interpret, and plot data using Carroll diagrams, then sort data either by using given criteria, or by choosing appropriate criteria.   | <ul style="list-style-type: none"> <li>• Do children understand what Carroll diagrams are and how they are used?</li> <li>• Can they sort by two criteria?</li> <li>• Can they sort by three criteria?</li> </ul>           | <ul style="list-style-type: none"> <li>• Slides</li> <li>• Mini whiteboards</li> <li>• Worksheet 5A/5B/5C</li> <li>• Challenge Cards (FSD? activity only)</li> <li>• Blank Carroll Diagram sheet (FSD? activity ideas)</li> </ul> |