Parents Count Too Helping your child with – representing and interpreting graphs and tables

In our daily lives we are called upon to understand information that is presented in graphs and tables. We see this type of information in newspapers and pamphlets, on bills and on television. Graphs can make it easy to record and interpret information as well as help us to make predictions such as predicting the weather, interest rates and the future cost of our home electricity usage. Children will learn to read and interpret graphs and tables not only during Mathematics lessons but also during Science, Health and other lessons.

How do children learn to make and interpret graphs and tables?

Initially children learn to construct graphs by collecting information in tables and then using objects or pictures to represent this information as a graph. Typically in the early years, children will be asked by their teacher to collect and record information about themselves, such as the pets they own, or about their environment, such as the colour of the cars in the car park. In early graphs, one picture stands for one object.

Later, children will learn to use tally marks (e.g. **INU** III) to represent the results of surveys. They may, for example be asked to use tally marks to record the number of cars that pass by the school during a given period of time. They will also be introduced to different types of graphs including column graphs, line graphs and sector (pie) graphs. It is important that children know how to interpret graphs and be able to identify how graphs could misrepresent information.

What can you do at home?

- Measure the height or weight of your child and track the changes over time on a graph.
- The next time you come across a graph in a newspaper on a topic that would be interesting to your child, sit down together to try to interpret it. Work together to answer questions such as: What is this graph telling us? How do we know whether the information is true? Is there a different way of representing this



information? Is there anything that you don't understand? -





- Show your child household bills which include graphs, such as a water or an electricity account and ask questions such as, How much more or less water did we use this time compared to the last bill? How can we save more water? How much do you think our water usage will go down if we do that? How much money do you think we will save?
- Together with your child, keep track of the time he or she spends watching television. At the end of the week, see if together you can make a graph to show the time spent.
- Play games such as Scissors, paper, rock with your child and use tally marks to keep a record of wins and losses. -
- With your child, read and discuss information shown on sporting competition tables.
- Read information books with your child and discuss tables and graphs that appear in them.
- Show your child how to locate and use a table of contents in a book.
- Draw up a table of the activities that your child completes during the week such as sports training, music or swimming lessons, household chores or special times during the school week such as library, computers, school sport and banking.





Helping your child with – Representing and interpreting graphs and tables Curriculum K–12 Directorate, © NSW Department of Education

English