Primary Mathematics Toolkit – Support material

Data and chance: Data – Suggestions for learning at home

### Why learning about data is important

Every day we are presented with information and data by the media, retailers and other sources. Children must be equipped with skills to represent, read, interpret and make judgements about data. Data is an area of mathematics which affects our daily lives and our decision-making.

IDEAS TO SUPPORT LEARNING

- Children who are interested in particular sports may like to compile data based on their interests, e.g., *data on goals scored, games won, lost and drawn*.
- Tournaments like the Olympics provide opportunities to compile medal data.
- Talk to your child about data sets when they are in newspapers or reported in the media. Ask them to consider who needs this information? Who is it important to? Why is it important?
- Every 7 years, the Central Statistics Office (CSO) carries out an official census. Involve your child in this process of collecting the information. Why does this information matter? Who does it matter to? The CSO website also has interesting visualisation tools that can be used to explore data such as the popularity of baby names, most common birthdays, etc.
- Encourage your child to collect data from everyday experiences, such as tracking the number of sunny days versus rainy days, or the types of birds seen in the back yard. Keep a simple tally chart or making observations in a journal.
- Provide opportunities for your child to sort and categorize objects at home, for example organise clothes by colour, books by genre, or groceries by type.
- Use graphing activities to visualize data such as their favourite colours, pets owned, or types of fruits eaten across a week. Discuss the results and what they represent.
- Involve your child in conducting simple real-life surveys or polls within your family or community.
- Take your child on field trips or nature walks where they can observe and collect data firsthand. They could count the number of birds at a bird feeder, measure the height of trees, or track the temperature throughout the day.
- Encourage your child to ask questions and explore mathematical concepts related to data. Create a supportive environment where they feel comfortable experimenting with numbers, making predictions, and drawing conclusions based on evidence.

Monthly Sales
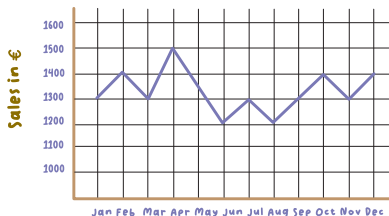
BOOKS

- *Tally O'Malley*, Stuart J. Murphy, 6+ years
- *Lemonade for Sale*, Stuart J. Murphy, 7+ years
- *Sir Cumference and the Off-the-Charts Dessert*, Cindy NNeuschwander,7+ years
- *The Grizzly Gazette*, Stuart J. Murphy, 7+ years
- *Less Than Zero*, Stuart J. Murphy, 8+ years

Your local library provides a wide range of free books and resources which support in developing children's mathematical learning

GAMES / ACTIVITIES

- Use tallies when completing activities such as planning for a party, organising events or keeping track of results of games such as Rock, Paper, Scissors.
- Encourage children to create data sets based on their interests, e.g., a *pictogram based on the types of toys they have, e.g., 5 dolls, 8 teddies, 10 books*.
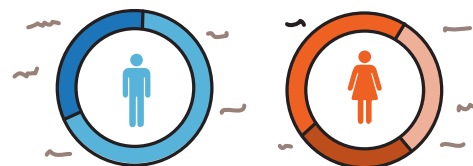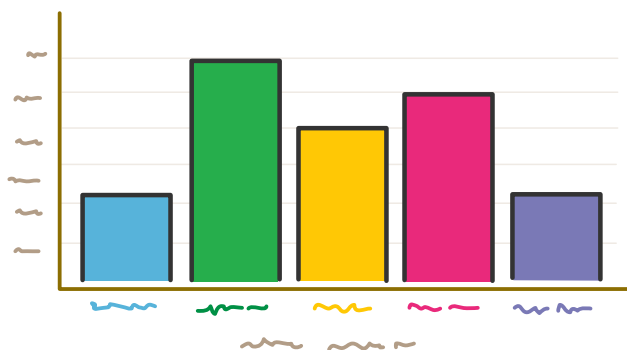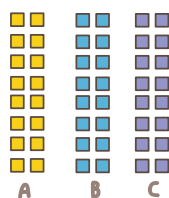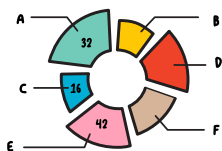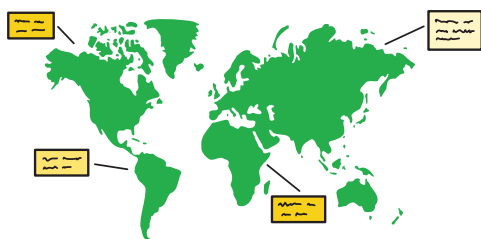
LEARNING ONLINE

- Help My Kid Learn www.helpmykidlearn.ie
- Scoilnet www.scoilnet.ie/primary/theme-pages/mathematics/
- Maths Week Ireland Parents' Zone www.mathsweek.ie
- Maths Eyes https://haveyougotmathseyes.com/

Useful terms to search online: data, learning, primary, maths, tallies, pictogram, block graphs, bar charts, trend graphs, surveys, representing data, analysing data, games, activities

63% 🧍

27% 🧍

ARTS AND CRAFTS

- Use items from the garden or park to compile a visual graph. An example of this would be a pictogram of items found on a nature walk, e.g., *acorns, leaves, pinecones*. Is there any other way of visually and creatively showing the items found?
- Design and build 3-D structures to represent and communicate data. For example, create a 3-D bar chart, trend graph, or pie chart.
- Examine the characteristics of materials by colour, texture, shape, etc. and sort these accordingly.
- Design infographics to represent data in a visually appealing manner and to effectively communicate key messages arising from the data.
- Examine the works of famous artists and record data on these. For example, explore the subjects of their work (people, nature, etc.) or the colour palette, drawing techniques they use. Use this data to create artworks in the style of various artists.

YOUR OWN IDEAS