

Introductory Lesson (Optional)

Theme

Data Collection

Key messages

- Many everyday problems can be solved by collecting information from others and by using this information to make changes for the better

Objectives

That the child will understand:

- the reason for collecting and analysing facts and figures (data and statistics)
- how data can be used to help us to solve real life problems and plan for the future

Follow-Up Activities

Let's Tally
Data Collection sheet

Integration/Linkage

Maths: Strand - Data
English: Oral Language / Writing

Teacher's Notes

Talk and Discussion

- Check if the children are aware of the administrative work that is carried out within the school and classroom.
- Elicit from the children what data and statistics are collected for school planning/use e.g. pupils names, addresses, phone numbers, occupation of parents, test results...
- Discuss with the children the importance of collecting and analysing this data – for future records, for school planning – staffing, resources, home-school links....
- Ask the children to come up with suggestions on data that could be collected for classroom planning e.g. number of students in each class, roll of attendance, number of boys/girls, means of travel to school, favourite subjects...
- Discuss how this data could be used to plan for the future and to prevent problems arising.
- A typical classroom problem is effective use of the school library. Elicit from the children why this might be so.
- By collecting data on the children's favourite authors, it might be possible to contact the local librarian and source some appropriate books for the classroom library with a view to having it used more. Discuss this possibility with the children.

Activity

Carry out this investigation with the children using the following steps:

1. Pose the question to be solved – Who are our favourite authors?
2. Discuss the problem and decide how it might be solved / investigated.
3. Distribute the tally sheets or recording sheets and demonstrate how they might be completed. (Tally sheets will be useful for collecting data on favourite authors only while recording sheets will give more information as children's names are also included. This would allow for further discussion/investigation e.g. books preferred by boys/girls or by different age groups etc..)
4. Allow time for the children to move about collecting the data. Another alternative may be to ask each child to call out his/her favourite author and to allow children to record each response on his/her sheet.
5. When the children are finished, the results can be examined and analysed for classroom use.
6. It is also possible to represent the data in graphical form e.g. block graph, horizontal or vertical bar chart...
7. Decide how the data might be used to ensure greater use of the classroom library.

Instructions for use of Recording Sheet

- Make a list of the children in your class in the table below.
- Each child will call out his/her favourite author.
- Make a note of the author's name in the top row.
- Tick the box opposite the pupil's name and under the author's name when it is called.
- When every child has given a response, calculate the total for each author.

Let's Tally

How can we use our class library more effectively. Perhaps if we had more books by our favourite authors, there might be a greater interest in the library.

Let's investigate:

- ✚ Each child will call out his/her favourite author.
- ✚ Make a note of the author's name in the author column.
- ✚ Each time that author is called, draw a stroke in the tally column beside the author's name. When you reach the fifth stroke, it is important to draw it through the first four. Then, start a new set of strokes.
- ✚ When every child has given a response, total your tally by counting in fives and adding your remaining strokes.

Author	Tally	≡	Total

- ✚ Which author was the most popular?
- ✚ Which author was the least popular?
- ✚ How might the above information be used in the classroom.?



Data Collection

[illegible]