



Carroll Diagrams

**Description:**

Pupils create Carroll diagrams in order to solve problems.

Numeracy Strategy reference:

Year 3
Handling data
Organising and using data
p92

Task analysis:

Pupils are required to:

- Sort objects to complete a Carroll diagram
- Create Carroll diagrams

Learning Objectives:

Pupils should be taught to solve a problem by collecting, sorting and organizing information in simple ways.

Suggested activities:**Oral work and mental calculation:**

Use OHP or whiteboard to introduce Carroll diagrams. Numbers are classified according to one criterion, as the example on the materials sheet overleaf.

Teaching activity:

Demonstrate the on-screen Carroll diagram of the Flood Alert animal rescue. As a class move the first animal to the correct field. Then ask the children to go on and complete the activity, sorting the animals between pet and farm animals.

List on the board the names of all the children in the class and their ages. Ask the pupils to complete the Carroll diagram activity sheet. Each pupil should appear in one of the four boxes. The children could draw a representation or write the name as appropriate.

Plenary:

Children to bring their own Carroll diagrams back to the whole class session and explain their findings.

Resources:

Flash Carroll diagram program. Carroll diagram printable activity sheets.

Learning outcomes:

Pupils should be able to:
Create Carroll diagrams to solve a problem.

Extension activities:

Explain that the school is considering opening a tuck shop. Ask the children to investigate which items would be most popular. (This setting of the scene is important as it shows that collecting data has a real purpose and it helps solve a problem).

Ask the children to design a questionnaire that will identify the favourite snack foods in their class. The children should then divide the resulting data into sweet and savoury and then use it to create a Carroll diagram on favourite foods crossed with gender.