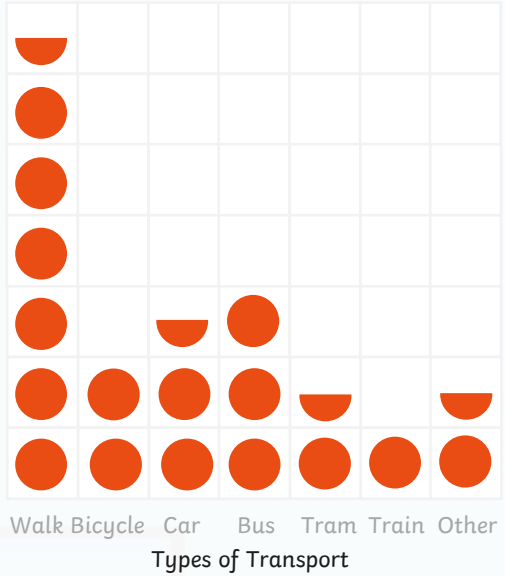
Types of Graphs or Charts

Pictograms

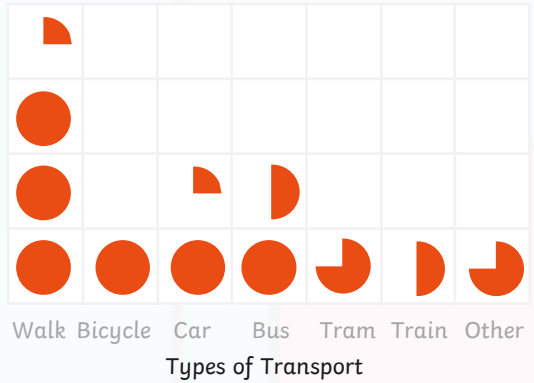
A Pictogram to Show How the Children in KS2 Travel to School



Key:

= 2 children

A Pictogram to Show How the Children in KS2 Travel to School



Key:

= 4 children

A pictogram uses pictures or symbols to represent **discrete data**.
A key shows the value represented by one picture or symbol.

It is important to identify the value of the whole picture or symbol in a pictogram, as part symbols are often used to show different values.

In both of these pictograms, the data is the same but the value of the symbol is different.

Bar Charts

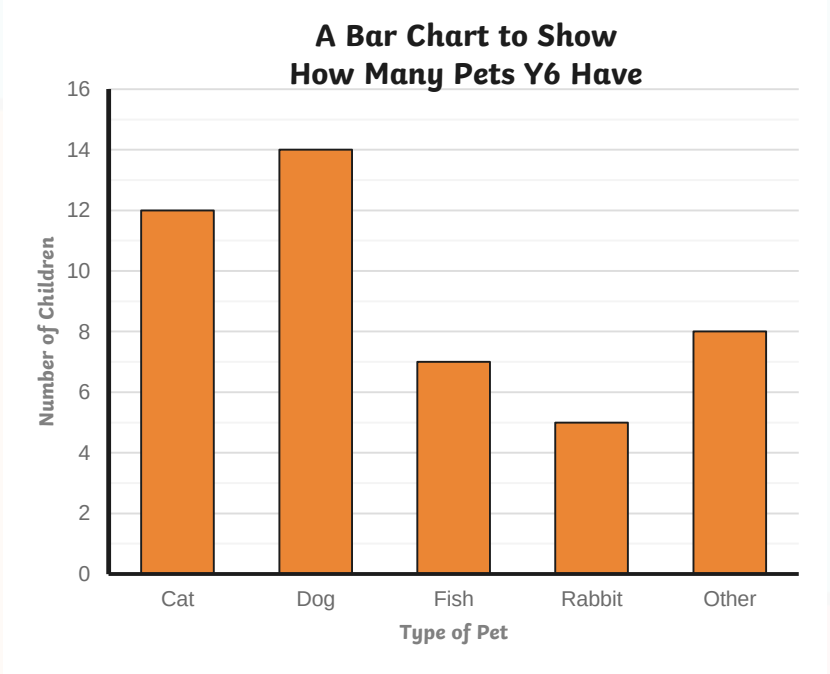
Data that is counted and has no in-between value is called **discrete data**. Discrete data is usually collected in a frequency table and then presented as a bar chart.

Pet	Number of Children
Cat	12
Dog	14
Fish	7
Rabbit	5
Other	8

A bar chart has a **horizontal** axis and a **vertical** axis.

- A bar chart must always have a **title** explaining what it shows.
- Bars must be carefully drawn to show the data.
- There must be a **gap** between each bar.
- Each bar must be the **same width**.

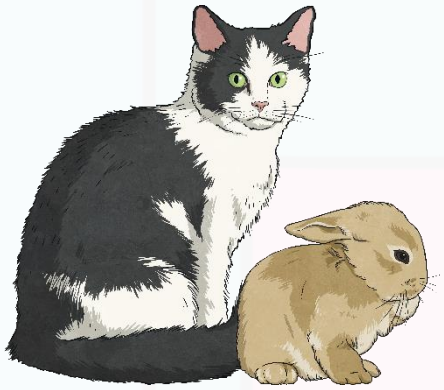
A **number line** is marked on the **vertical** axis. The scale of this number line is chosen based on the data range.
The **data categories** are organised on the **horizontal** axis.
Each axis must have a **label** explaining what it shows.



Bar Charts

Discrete data in each category can also be represented in subcategories:

Pet	Number of Boys	Number of Girls
Cat	7	5
Dog	6	8
Fish	3	4
Rabbit	1	4
Other	2	6



We can draw a grouped bar chart to show this data. In this bar chart, each category has more than one bar. A key is used to identify the subcategories of the data.