

## 5 words to remember

**database:** a collection of data (information) organised so that groups of records can be identified

**dataset:** a set of data from a group related to a particular topic

**filter:** a way to identify some of the data (information) based on one or more criteria, for example which of the pirates wear hats

**field:** information in a database that relates to a single type of information, such as age

**record:** information in a database that relates to one individual or case, for example a library database would have a record for each book

## Knowledge check – data records and fields

 Name: Aggie Kidd Age: 28 Height: 185 cm Pet: Dog 🐕	 Name: Anne Maynard Age: 42 Height: 180 cm Pet: None	 Name: Kelvin Maynard Age: 32 Height: 163 cm Pet: Dog 🐕	 Name: Yen Wong Age: 21 Height: 172 cm Pet: Monkey 🐒
 Name: Penelope Swann Age: 25 Height: 183 cm Pet: None	 Name: Wanda Ransom Age: 35 Height: 179 cm Pet: None	 Name: Charles Kidd Age: 33 Height: 157 cm Pet: Dog 🐕	 Name: Lee Roberts Age: 28 Height: 181 cm Pet: Monkey 🐒

This **dataset** contains 8 **records**.  
Each record has 4 **fields**: Name, Age, Height and Pet.

## Key takeaways

- Computers are very helpful for managing lots of information (data).
- We can organise data into tables, which can then be sorted and filtered to find the information we are looking for.
- Tree diagrams can be used to find information using questions that can be answered with 'yes' or 'no'.
- Forms can be used to enter data into a **database**. Forms can be completed on paper, or they can be completed on a computer.
- Filter buttons can be used in computer data programs to help find information.

## Knowledge check: Understanding tables

Tables help to organise data using rows and columns. Using computer programs such as Excel or Google Sheets allows us to sort and **filter** information in tables quickly.

This is the filter symbol: ▼

In school, we have lots of databases that are organised into tables, such as the register and library catalogue.

Each field has its own column

	A	B	C	D	E	F
1	First name	Last name	Age	Height (cm)	Gender	Pet
2	Jack	Vane	25	174	Male	Parrot
3	Ted	Teach	23	180	Male	None
4	Patrick	Ormond	30	161	Male	Parrot
5	Edward	Pugwash	28	170	Male	Parrot
6	Charles	Kidd	33	157	Male	Dog
7	Lee	Roberts	28	181	Male	Monkey
8	Isaac	Drake	25	158	Male	None
9	Caden	Morgan	26	160	Male	None
10	John	Barnet	22	163	Male	Cat

Each row has a new record

**Test yourself:** Use the table above to find the names of people who have a pet parrot.

## Knowledge check: Understanding tree diagrams

We can use tree diagrams to show data. They use a sequence of questions to separate the data and identify a single record of information. Questions are the branches of the tree. The end points, where no more questions can be asked, are the leaves.

**Test yourself:** How many leaves does this tree diagram have?

