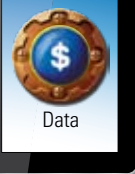


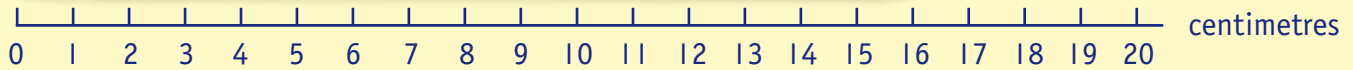
- 1 Complete the column graph. Write the children's names under the columns.
- 2 What is this graph telling us? _____
- 3 Who has: **a** the most books? _____ **b** the least books? _____
- 4 Who has two less books than Amy? _____
- 5 Which two children together have 9 books? _____
- 6 How many books do the children have altogether? _____
- 7 If John gives half his books to Min, how many will he now have? _____
- 8 Does the graph tell us who likes reading most? Why or why not?



Column graph

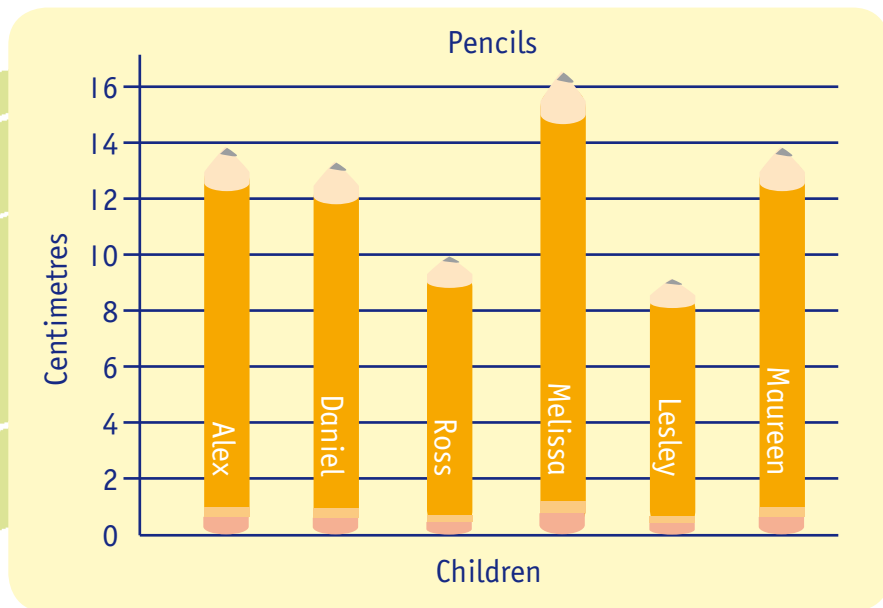


At the beginning of the year Mr Wright gave the students in his class new pencils.



1 How long were the pencils? _____

One month later Mr Wright asked some students how long their pencils were now. He graphed the results.



- 2 How long is Alex's pencil? _____
- 3 How long is Daniel's pencil? _____
- 4 Who has the longest pencil? _____
- 5 Whose pencil is the shortest? _____
- 6 a How long is Lesley's pencil? _____
b How much shorter is it now than when she got it? _____
- 7 How much shorter is Ross's pencil now than when Mr Wright gave it to him? _____
- 8 Give one reason why Lesley's pencil is so short.

- 9 Why do you think Melissa's pencil is so long?

- 10 Why did Mr Wright measure pencils? _____

Draw a diagram

Show this information in a different way. Make sure you label your work clearly.





Problem solving

Class favourites survey

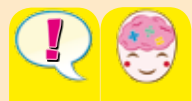
Find out about your class. Survey the class about a topic: Sports, Food or Games.
What questions will you ask?

Carry out a survey.

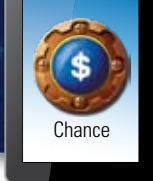
Tally

Show your results as a picture graph or column graph.

What did you find out?



Certain, likely, unlikely, impossible



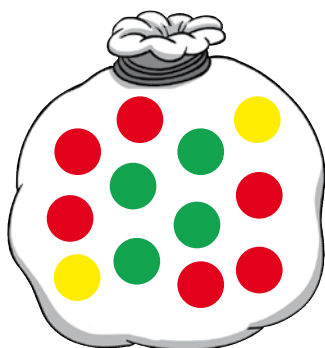
1 Write *certain, likely, unlikely* or *impossible*.

- a The sky will be green tomorrow. _____
- b The sun will rise in the morning. _____
- c I may not be able to go to the party. _____
- d I will grow taller than a giraffe. _____
- e It might rain tonight. _____
- f We will have a holiday this year. _____



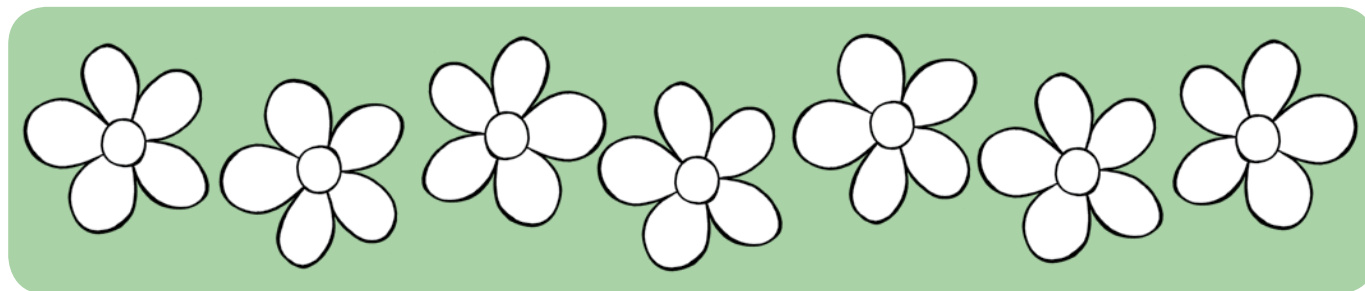
2 There are 6 red, 4 green and 2 yellow balls in the bag.

Without looking what is your chance of choosing a:

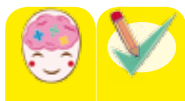
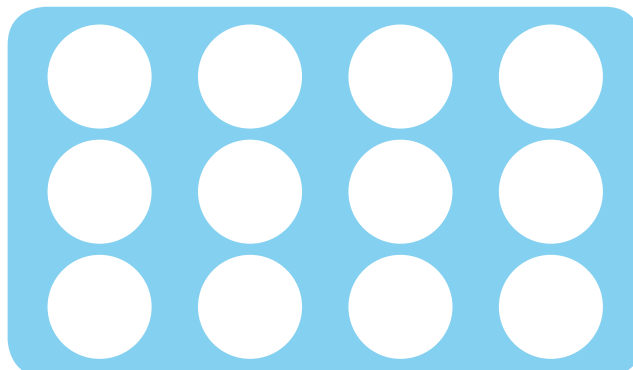


a red ball?	50-50	likely	unlikely	impossible
b yellow ball?	50-50	likely	unlikely	impossible
c green ball?	50-50	likely	unlikely	impossible
d purple ball?	50-50	likely	unlikely	impossible
e ball?	50-50	likely	unlikely	impossible

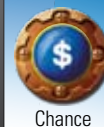
3 Colour the flowers so that it would be likely you choose purple, unlikely you choose orange, impossible to choose white.



4 Colour the marbles so you have an equal chance of choosing red or blue.



Chance outcomes



The different ways a thing can happen are called **outcomes**.

- 1 A coin is tossed.
a What two ways can it fall? _____
b How many outcomes can there be? _____

- 2 a What colours show on traffic lights? _____
b How many are there? _____
c How many possible outcomes are there? _____



- 3 a How many faces are on this die? _____
b If you toss the die what are the possible outcomes?

c How many possible outcomes are there? _____

- 4 This basket contains two apples and two oranges.
Without looking, you pick out one piece of fruit.

a What could it be? _____

b How many possible outcomes are there? _____



- 5 Write something where:

a the outcome is certain. _____

b the outcome is impossible. _____

c the outcome is likely. _____

d the outcome is unlikely. _____



Challenge! Work with a partner. Throw a die 10 times.

Record the outcomes. There are 6 possible outcomes.

Does each outcome occur the same number of times? Why or why not?

