## Statistics

## HERE'S THE MATHS

A pictogram uses pictures to represent data. The picture used for a pictogram usually relates to the data that has been collected.


## Year 2 Maths

 Newsletter 1120 children were asked which of these ice-cream flavours is their favourite.

| Flavour | Number of children who chose the flavour |
| :--- | :--- |
| Vanilla |  |
| Chocolate |  |
| Mint choc chip |  |

## ACTIVITY

## What to do

- Collect data and create a pictogram for the cutlery (forks, knives and spoons) found in your kitchen. You could use fork, knife and spoon symbols.
- Encourage your child to ask and answer questions about

You will need:

- pencil and paper
- ruler their pictogram.


## Variation

- Collect information about different topics and create pictograms using different, relevant symbols. For example:
- colours of cars that drive past your house in X minutes or are parked in your road
- types or colours of clothes in a wardrobe
- colours of front doors
- coins in a purse.


## QUESTIONS TO ASK

How many children said $X$ ?

How many fewer/more children said $X$ than $Y$ ?

How many children gave the two least/most popular answers?

## Addition and subtraction

## HERE'S THE MATHS

Partitioning a 2-digit number means splitting it into tens and ones. Partitioning 58 gives 50 and 8.

$$
\left.\begin{array}{rlrl}
\text { Addition using partitioning: } \begin{array}{rlrl}
37+26 & =30+20+7+6 & \text { or } & 37+26
\end{array}=37+20+6 \\
& =50+13 \\
& =63
\end{array} \quad \begin{array}{rl} 
& =67
\end{array}\right)
$$

## ACTIVITY

## What to do



- Choose whether to play an addition or subtraction game. Copy the relevant pair of spinners onto a piece of paper, making them large enough to use as spinners. Use the paper clip and pencil as shown in the picture above to create a spinner.
- Take turns to use the spinner on both circles to generate two numbers.
- Write down the calculation to add or subtract $(\mathrm{A}-\mathrm{B})$ the two numbers using one of the methods shown on this page. Score one point for each correct answer.
- The winner is the player with the most points after 5 minutes.


## Variation

- Change the numbers on the spinners but make sure that the biggest number on spinner $B$ is smaller than the smallest number on spinner $A$.


## QUESTIONS TO ASK

subtract those two numbers?
How did you add $\left.\quad \begin{array}{c}\text { How did you } \\ \text { those two } \\ \text { subtract those } \\ \text { numbers } \\ \text { two numbers? }\end{array}\right]=$

## Addition and subtraction

## HERE'S THE MATHS

Partitioning a 2-digit number means splitting it into tens and ones. Partitioning 58 gives 50 and 8 .

Your child has learnt how to add and subtract two 2-digit numbers using written methods:

Addition $37+45: \quad$\begin{tabular}{l}
$30+7$ <br>
$\frac{40+5}{70+12}$ <br>
\hline

$=82$

37 <br>
$+\frac{45}{12}$

$\quad$ Subtraction $58-13:$

58 <br>
$\frac{-13}{82}$
\end{tabular}

## ACTIVITY

| Number 1 |  | Number 2 |  |
| :--- | :--- | :--- | :--- |
| (tens) | (ones) | (tens) | (ones) |
|  |  |  |  |

## What to do

## You will need:

- 1-6 dice
- pencil and paper (each)
- Decide whether to play an addition or subtraction round of the game.
- Take turns to roll the dice four times. Write down the four numbers in the four boxes and decide how to use them to create two 2-digit numbers. (For subtraction, the number of tens in Number 2 must be less than the number of tens in Number 1 and likewise for the number of ones. Take Number 2 away from Number 1.)
- Both use a written method to work out the answer to the question. The person who writes out their workings and gets the correct answer first scores a point.
- The winner is the person with the most points after 5 minutes or 5 calculations.


## Variation

- Generate 5 or 10 questions and challenge each other to write workings and work out the answers as quickly as possible.


## QUESTIONS TO ASK

```
What do you get
if you partition the
    number 31?
```



How did you add those two numbers together?

How did you subtract those two numbers?

