## Statistics

## HERE'S THE MATHS

This week your child is learning to show and represent data, and to answer questions about the data. In pictograms a picture can represent 2 or 5 units. The bar charts can have scales with intervals of 5 and 10. Your child is learning to name the axes as the horizontal axis and the vertical axis.

## ACTIVITY



What to do

- Choose the bar chart or pictogram to focus on.
- Discuss the values.
- Invent a context for the results.
- Make up five questions about the results.

Variation

- Use the other graph to invent a different scenario.


## QUESTIONS TO ASK




## Year 3 <br> Maths

Newsletter 12

Date: $\qquad$ Name: $\qquad$

## MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:

- Multiplication and division
- Statistics


## KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:

- use the formal written method to calculate 2-digit numbers times 1-digit numbers
- use the formal written method to calculate 2-digit numbers divided by 1-digit numbers
- display and explain data using bar charts, pictograms and tables.


## TIPS FOR GOOD HOMEWORK HABITS

Reflect on the variety of maths tasks that you have enjoyed throughout the year. Try to decide which strategies have helped you to understand maths most easily. Congratulate your child on their effort!

## Multiplication and division

## HERE'S THE MATHS

Your child is consolidating their understanding of multiplication of 2-digit numbers by a single digit. They may be using the expanded written method or the formal written method. (Resist the temptation to show them any different method that you use.) They should also be encouraged to work out this type of calculation mentally when they can. Good recall of facts about the times tables helps multiplication calculations enormously.

## ACTIVITY

## What to do

- Write down six different 2-digit numbers greater than 50 .
- Multiply each number by 3 .
- Take turns to carry out the calculation on paper (using the expanded written method or the formal written method) or to use the calculator.


## You will need:

- pencil and paper
- calculator (e.g. on phone)
- Check that you have the same answer.
- Play for 10 minutes, multiplying the numbers by 4,5 and 8 in turn.


## QUESTIONS TO ASK

Count backwards in 8s from 96.

Say your 40 times table up to 480.

Which of these numbers is not a multiple of 8 ?

24, 42, 56

- Ask more questions of these types and ask your child to make up questions to ask you.

Explain what happens when you multiply a number by 10.

## Why is

 multiplication a useful operation?
## Multiplication and division

## HERE'S THE MATHS

Your child is learning to divide a 2-digit number by a single digit (2, 3, 4, 5 and 8 ), using a number of different methods. Let them explain their methods to you - examples are shown below. Instant recall of multiplication and division facts makes division much easier for your child.

| Expan | ded method | Formal written method |
| :---: | :---: | :---: |
| $\begin{array}{rr} \\ 3 & 26 \\ & 78 \\ \\ 60\end{array}$ | $20 \times 3$ | то |
|  |  | 26 |
|  |  | $3 \longdiv { 7 1 8 }$ |
| 18 |  |  |
| 18 | $6 \times 3$ |  |
| 0 |  |  |

## ACTIVITY

## What to do

- Use the numbers in a mobile phone number to make six different 2-digit numbers greater than 50 . (You can rearrange the numbers and use them more than once.)


## You will need:

- calculator
- pencil and paper
- Divide each number by 3 .
- Take turns to carry out the calculation on paper or to use the calculator.
- Check that you have the same answer.
- Play for 10 minutes, dividing the numbers by 4,5 and 8 in turn.


## QUESTIONS TO ASK

How can you tell if a number
is exactly divisible by $5 ?$ is exactly divisible by 5 ? odd and even numbers in the 3 times table?

Which of these numbers is exactly divisible by 6 ? 20, 30, 40 divisible by 4 ?

## When is division a useful operation?

