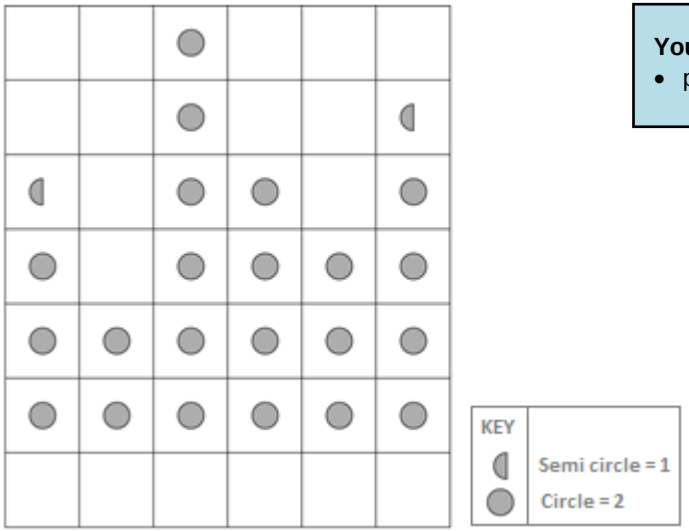
Statistics

HERE'S THE MATHS

This week's maths includes presenting and interpreting discrete data using pictograms. A good pictogram should be clear, simple and easy to divide. A key shows what the pictogram represents.

ACTIVITY



You will need:
- pencil and paper

What to do
- Each person makes up a scenario to fit the data and writes four questions.
- Answer each other's questions.
- Design a better pictogram for your data.

QUESTIONS TO ASK

What scale intervals are appropriate with this symbol?

What diagrams make good pictograms?

Why is it important to label the *x*-axis and include a key?

Why is it unnecessary to label the second axis in a pictogram?

Year 4 Maths Newsletter 7

Date: _____ **Name:** _____

MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:
- Addition and subtraction
- Statistics

KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:
- estimate and use inverse operations to check answers to a calculation, e.g. 576 – 289 = 287. Add 289 to 287 to check the answer is correct
- subtraction of HTO using various methods, including the formal written method for subtraction
- interpret and present data using pictograms (picture symbols for words).

TIPS FOR GOOD HOMEWORK HABITS

Be positive about maths even if you didn't like it at school. Let your child explain to you the different strategies and methods that they are learning. Avoid teaching your child methods you used at school as it may confuse them.

Addition and subtraction

HERE'S THE MATHS

This week's focus is on addition of HTO. Your child should now be familiar with the formal written method for addition but also appreciate that it is not always the best method to use. Remind them to estimate first and check answers to calculations afterwards.

ACTIVITY

What to do

- Use cards to make two 3-digit numbers.
- Both estimate the sum of the two numbers.
- Discuss how you did this and whether your estimates were the same.
- One person carries out the calculation using a method of choice.
- The other person checks with a calculator.
- Swap roles.
- Continue for 10 minutes.

You will need:

- pack of cards with 10s removed (picture cards represent zero)
- calculator (or use mobile phone)

QUESTIONS TO ASK

Add 8 to 1235.

Add 70 to 958.

Add 300 to 842.

Count back in 100s from 1255 to 55.

Count on in tens from 3175 to 3225.

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

Addition and subtraction

HERE'S THE MATHS

This week's focus is on subtraction of HTO. Your child should now be familiar with the formal written method for subtraction but also appreciate that it is not always the best method to use. Remind them to estimate first and check answers to calculations afterwards.

Example (using decomposition): 576 − 389 Estimate 600 − 400 = 200

Formal method

$$\begin{array}{r} {}^{4}\cancel{5}\ {}^{16}\cancel{7}\ {}^{1}6 \\ -\ 3\ 8\ 9 \\ \hline 1\ 8\ 7 \end{array}$$

Check using inverse

$$\begin{array}{r} 3\ 8\ 9 \\ +\ 1\ 8\ 7 \\ \hline 5\ 7\ 6 \\ 1\ 1 \end{array}$$

ACTIVITY

8354	4501	2973	2145
3267	2169	1354	5149

You will need:

- pencil and paper

What to do

- Look at the table of numbers.
- Discuss how many different subtraction calculations are possible.
- Find one calculation each that you could do mentally.
- Find one calculation each for which you would use the formal written method.
- Estimate the answer and carry out the calculations. Check each other's work.
- Continue for 10 minutes.

Variation

- Write a new set of numbers that will allow you to carry out the same process with new numbers.

QUESTIONS TO ASK

Explain decomposition.

What is 3467 − 1999?

What is the inverse of subtraction?

Why is it important to estimate?

What is 6004 − 1998?