



Year 4: Spring term 2

Topics studied this half term:

- Decimals

Within decimals, your children will be learning to:

- Recognise tenths and hundredths
- Write tenths as decimals
- Write tenths on a place value grid
- Identify tenths on a number line
- Divide 1-digit numbers by 10
- Divide 2-digit numbers by 10
- Write hundredths as decimals
- Write hundredths on a place value grid
- Divide 1 or 2-digit numbers by 100
- Make a whole
- Write decimals
- Compare decimals
- Order decimals
- Round decimals
- Calculate halves and quarters

Tips for good homework habits:

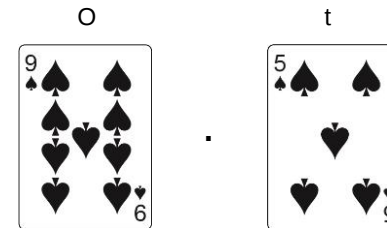
Take a break before your child gets bored or overwhelmed.

Decimals

HERE'S THE MATHS

Your child is learning to understand tenths, expressed as fractions and as decimal fractions. They put decimals with one decimal place in order and round tenths to the nearest whole number. When rounding, 0.5 or greater is rounded up, while 0.4 or less is rounded down.

ACTIVITY



You will need:

- pack of cards with picture cards and 10s removed

What to do

- You both begin with ten points. Decide who will win if the number has to be rounded up and the other person will win if the number is rounded down.
- Shuffle the pack.
- Turn over the first two cards and put them in the ones and tenths places.
- Round the number to the nearest whole number.
- The winner adds one point to their total and the loser drops a point.
- Play for 5 minutes.
- Swap 'up' and 'down' and play again for 5 minutes.
- Discuss if it is better to be the 'up' or the 'down' person.

Variation

- Change the scoring so that you win and lose according to whether the rounded number is odd or even.

QUESTIONS TO ASK

How many tenths in a half?

Count in tenths from 0.4 to 1.4.

How many tenths in 2?

What is $\frac{9}{10}$ as a decimal?

What is 0.3 as a fraction?

Decimals

HERE'S THE MATHS

This week's focus is decimal numbers. Help your child to establish that the correct way of reading the numbers after the decimal point is individual digits so 1.23 is read as 'one point two three', never as 'one point twenty three'. They are learning to divide numbers by 10 and 100, leading to decimals with up to two decimal places.

ACTIVITY

32	10	43	6	78
9	21	65	71	4
26	59	7	18	98
2	80	38	52	3
49	19	88	91	44
35	5	57	63	25

You will need:

- coin
- counters in two

What to do

- Take turns to choose a number on the grid.
- Toss the coin – for tails divide by 10, for heads divide by 100 (i.e. T for tails and tens, and H for heads and hundreds).
- Say the answer. If it is correct, cover it with a counter of your colour.
- If your answer is incorrect, leave it uncovered to be played again.
- The winner has the most counters.

QUESTIONS TO ASK

What happens when you divide a number by 10?

What happens when you divide a number by 100?

Express $\frac{37}{100}$ as a decimal.

Which is bigger, $\frac{6}{10}$ or $\frac{59}{100}$?

Express 0.81 as a fraction.

Decimals

HERE'S THE MATHS

Your child is learning to recognise the decimal equivalents of simple fractions, including tenths and hundredths. They need to know that $\frac{1}{2}$ is 0.5, $\frac{1}{4}$ is 0.25, $\frac{3}{4}$ is 0.75, $\frac{1}{10}$ is 0.1 and 0.01 is $\frac{1}{100}$. Fluency with these facts leads to confidence with handling decimals.

ACTIVITY

1	$\frac{1}{2}$ l	0.5 l	0.4 l	0.5 l
2	$\frac{1}{4}$ l	0.2 l	0.2 l	0.2 l
3	1 l	1.1 l	1.1 l	1.1 l
4	$\frac{3}{4}$ l	0.7 l	0.7 l	0.7 l
5	0.4 l	0.4 l	0.3 l	0.3 l
6	590ml	0.6 l	0.5 l	0.6 l

What to do

- Take turns to complete the gaps in the first line by rolling the dice.
- Order the decimals.
- Continue with the next line.
- Rub out the grid so that you can reuse it.

You will need:

- 1–6 dice
- pencil and rubber

Variation

- Use 1–9 cards to give a bigger range of decimals.

QUESTIONS TO ASK

How is $\frac{1}{4}$, ($\frac{1}{2}$, $\frac{3}{4}$, etc.) expressed as a decimal fraction?

What is $\frac{87}{100}$ as a decimal?

How many hundredths in 0.28?