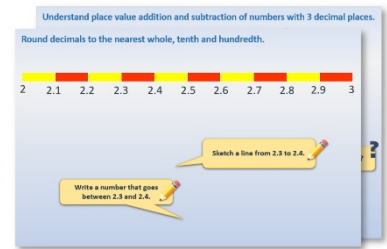


Week 5, Day 3

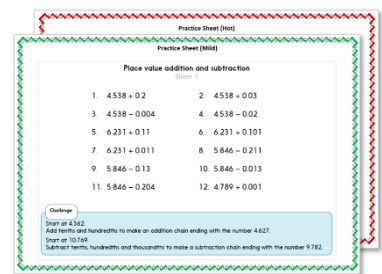
Fractions and percentages

Each day covers one maths topic. It should take you about 1 hour or just a little more.

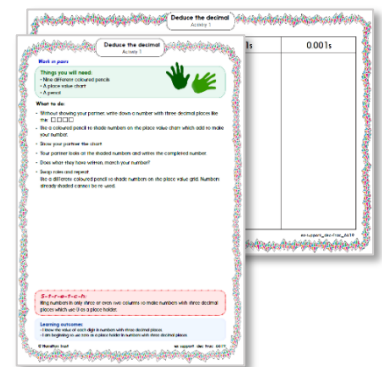
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



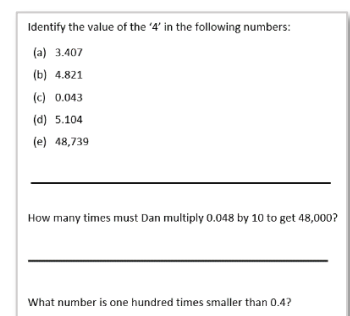
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Find percentages, link to proportion.

We can use fractions or percentages to describe a proportion.

In one group of 10 children, 3 prefer cycling and 7 prefer swimming.

10 children	
$\frac{3}{10}$ 30% 3 children prefer cycling	$\frac{7}{10}$ 70% 7 children prefer swimming

30 children are asked. The same proportion of children prefer cycling. How many children is this?

30 children	
$\frac{3}{10}$ 30% 9 children prefer cycling	$\frac{7}{10}$ 70% 21 children prefer swimming

If 60 children were asked. How would we change the bar model diagram? **Double the numbers of children.**

If the same proportion preferred cycling, how many would this be?

Learning Reminders

Find percentages, link to proportion.

40 children were asked and 75% preferred swimming.
The rest preferred cycling.

Let's draw a bar model diagram to show this.

What is the fraction of children who chose swimming rather than cycling?

How many children choose swimming? And cycling?

40 children	
$\frac{1}{4}$ 25% ? children prefer cycling	$\frac{3}{4}$ 75% ? children prefer swimming

Practice Sheet Mild

Equivalent fractions and percentages

30 children were asked to vote for cycling, swimming or football as their favourite weekend activity.

Fraction	Percentage	Number of children
$\frac{1}{2}$ of children prefer swimming		
$\frac{3}{10}$ of children prefer cycling		
The rest prefer football		

30 children were asked to vote for oranges, bananas or apples as their favourite fruit.

Fraction	Percentage	Number of children
$\frac{2}{5}$ of children prefer bananas		
$\frac{3}{10}$ of children prefer apples		
The rest prefer oranges		

30 children were asked to vote for dogs, cats or rabbits as their ideal pet.

Fraction	Percentage	Number of children
$\frac{1}{2}$ of children prefer dogs		
$\frac{1}{5}$ of children prefer cats		
The rest prefer rabbits		

Practice Sheet Hot

Equivalent fractions and percentages

40 children were asked to vote for cycling, swimming or football as their favourite weekend activity.

Fraction	Percentage	Number of children
<input type="checkbox"/> preferred swimming	20%	
<input type="checkbox"/> preferred cycling		20
The rest preferred football		

60 children were asked to vote for dogs, cats or rabbits as their ideal pet.

Fraction	Percentage	Number of children
<input type="checkbox"/> preferred dogs		
$\frac{3}{10}$ preferred cats		
The rest preferred rabbits		12

50 children were asked to vote for oranges, bananas or apples as their favourite fruit.

Fraction	Percentage	Number of children
<input type="checkbox"/> preferred oranges		5
<input type="checkbox"/> preferred bananas		
The rest preferred apples	30%	

Practice Sheets Answers

Equivalent fractions and percentages (mild)

Swimming 50%	15 children
Cycling 30%	9 children
Football 20%	6 children

Bananas 40%	12 children
Apples 30%	9 children
Oranges 30%	9 children

Dogs 50%	15 children
Cats 20%	6 children
Rabbits 30%	9 children

Equivalent fractions and percentages (hot)

Swimming	$\frac{1}{5}$	20%	8 children
Cycling	$\frac{1}{2}$	50%	20 children
Football		30%	12 children

Oranges	$\frac{1}{10}$	10%	5 children
Bananas	$\frac{3}{5}$	60%	30 children
Apples		30%	15 children

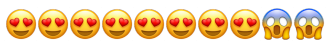
Dogs	$\frac{1}{2}$	50%	30 children
Cats		30%	18 children
Rabbits		20%	12 children

A Bit Stuck? Emojis



7 out of 10 faces are happy. This is $\frac{7}{10}$ or 70%.

For each row of emojis write how many are happy, what fraction this is and what percentage this is equivalent to.



Check your understanding Questions

Complete the bar models.

32 children	
$\frac{1}{4}$? chn	$\frac{3}{4}$? chn

40 children	
40% ? chn	60% ? chn

If 6 children in a class do not like sport, and there are 30 children in the class, what proportion *do* like sport?

Give your answer as a fraction *and* as a percentage.

Fold here to hide answers

Check your understanding Answers

Complete the bar models.

32 children	
$\frac{1}{4}$ 8 chn	$\frac{3}{4}$ 24 chn

40 children	
40% 16 chn	60% 24 chn

If 6 children in a class do not like sport, and there are 30 children in the class, what proportion *do* like sport?

Give your answer as a fraction *and* as a percentage.

24 like sport which is $\frac{24}{30}$ or $\frac{4}{5}$ as a fraction and 80% as a percentage.