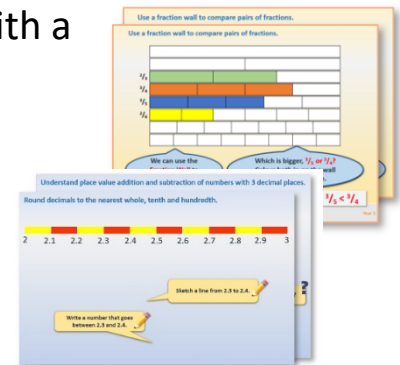


## Week 8, Day 3

### Use equivalent fractions to find percentages.

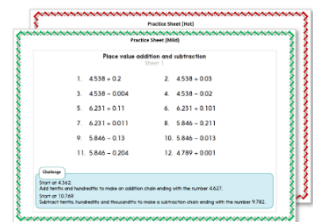
Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.

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

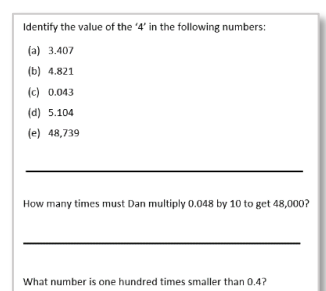


3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets?  
Have a go at the **Investigation**...

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



## Learning Reminders

Use equivalent fractions to find percentages.

**Unit fractions** always have a numerator of 1, e.g.  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{10}$ .

Remember we can find **unit fractions** of a number by dividing by the **denominator** (bottom number) of the fraction.

To find  $\frac{1}{4}$  of 80 divide 80 by 4.  $\frac{1}{4}$  of 80 = 20.

**Non-unit fractions** always have a **numerator** (top number) of more than 1, e.g.  $\frac{3}{4}$ ,  $\frac{2}{5}$ ,  $\frac{7}{10}$ .

Remember we can find **non-unit fractions** of a number by dividing by the denominator, then multiplying by the numerator of the fraction.

To find  $\frac{2}{5}$  of 30 divide 30 by 5 then multiply by 2.  
 $\frac{1}{5}$  of 30 = 6,  $\frac{2}{5}$  of 30 = 12.

## Learning Reminders

Use equivalent fractions to find percentages.

Hamilton Primary school has a £500 grant to spend to improve the outside space. All 200 children were asked to vote for what they would like. 50% voted for a wildlife pond, 25% voted for a climbing frame, and 25% voted for friendship benches.

We can use **equivalent fractions** to help find **percentages**!

How can we find 50% of 200?

50% is equivalent to  $\frac{1}{2}$ , so we can find  $\frac{1}{2}$  of 200.

100 children voted for a wildlife pond.

How can we find 25% of 200?

25% is equivalent to  $\frac{1}{4}$ , so we can find  $\frac{1}{4}$  of 200.

50 children voted for a climbing frame and 50 for friendship benches.

## Learning Reminders

Use equivalent fractions to find percentages.

Moreton Primary also has £500 grant. They have 150 children. 10% voted for the friendship benches, 20% for a climbing frame and 70% for a wildlife pond.

How can we find  
10% of 150?

10% is  
equivalent to  
 $\frac{1}{10}$ , so we can  
find  $\frac{1}{10}$  of 150.

$\frac{1}{10}$  of 150 =  $150 \div 10 = 15$ .  
15 children voted for  
friendship benches.

To find 20% double the answer for  
10%. Double 15 = 30.  
30 children voted for a climbing  
frame.

To find 70% multiply the answer for  
10% by 7.  $15 \times 7 = 105$ .  
105 children voted for a wildlife  
pond.

## Practice Sheet Mild

### Comparing percentages

The following new woodlands have been planted:

#### **Burley Common**

100 trees

50% oak, 20% ash, 15% beech, 15% willow

#### **Merttens Meadow**

300 trees

20% oak, 20% hazel, 40% willow, 20% beech

#### **Chidgey Common**

200 trees

40% oak, 30% beech, 10% ash, 20% sweet chestnut

#### **Holes Hollow**

200 trees

25% oak, 10% hazel, 20% willow, 15% beech, 30% ash

Calculate how many trees of each type there are in each of the four woodlands.

## Practice Sheet Hot

### Comparing percentages

The following new woodlands have been planted:

#### **Burley Common**

100 trees

50% oak, 20% ash, 15% beech, 15% willow

#### **Merttens Meadow**

150 trees

20% oak, 20% hazel, 40% willow, 20% beech

#### **Chidgey Common**

200 trees

40% oak, 30% beech, 10% ash, 20% sweet chestnut

#### **Holes Hollow**

120 trees

25% oak, 10% hazel, 15% willow, 30% beech, 20% ash

Calculate how many trees of each type there are in each of the four woodlands.

#### **Challenge**

In Weston Wood, there are 280 trees, as follows:

14 holly

126 lime

84 beech

56 silver birch.

What percentages do these numbers represent?