

Year 5,

Please check Education City for any maths tasks relating to this week's work. Remember, you can do the tasks (on Education City) as many times as you want- so if you want to try the activity again and improve your score at the end of the week, after all your incredible learning, you can do!

None of your maths work needs to be sent in to your teachers, there are answers at the end of each PowerPoint for you to self-mark.

You are doing a great job!

Starter

Order the following fractions from smallest to largest:		
$\frac{7}{8}$	$\frac{3}{4}$	$\frac{1}{2}$
$\frac{5}{8}$	$\frac{9}{16}$	
$\frac{5}{8} + \frac{1}{4} =$	$5634 \div 5 =$	$4.5 + 2.76 =$

## 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?

## A Bit Stuck?

Linking fractions and division

$40 \div 5 =$  , so ~~1/5~~ of 40 is

~~1/5~~ of 40 is

$40 \div 10 =$  , so ~~1/10~~ of 40 is

~~1/10~~ of 40 is

~~3/10~~ of 40 is

$40 \div 8 =$  , so ~~1/8~~ of 40 is

~~3/8~~ of 40 is

~~5/8~~ of 40 is



Starter

Order the following fractions from smallest to largest:				
$\frac{7}{8}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{9}{16}$
$\frac{1}{2}, \frac{9}{16}, \frac{5}{8}, \frac{3}{4}, \frac{7}{8}$				
$\frac{5}{8} + \frac{1}{4} = \frac{7}{8}$	$5634 \div 5 =$ $1126 \text{ r } 4$	$4.5 + 2.76 = 7.26$		

No vinculum so I have used a slash to represent it

# Practice Sheets Answers

## Comparing percentages (mild)

Burley Common has:  
50 oak, 20 ash, 15 beech and 15 willow.

Merttens Meadow has:  
60 oak, 60 hazel, 120 willow and 60 beech.

Chidgey Common has:  
80 oak, 60 beech, 20 ash and 40 sweet chestnut.

Holes Hollow has:  
50 oak, 20 hazel, 40 willow, 30 beech and 60 ash.

## Comparing percentages (hot)

Burley Common has:  
50 oak, 20 ash, 15 beech and 15 willow.

Merttens Meadow has:  
30 oak, 30 hazel, 60 willow and 30 beech.

Chidgey Common has:  
80 oak, 60 beech, 20 ash and 40 sweet chestnut.

Holes Hollow has:  
30 oak, 12 hazel, 18 willow, 36 beech and 24 ash.

### Challenge

14 holly = 5 %  
126 lime = 45 %  
84 beech = 30 %  
56 silver birch = 20 %

A Bit Stuck? Answers

Linking fractions and division

$40 \div 5 = 8$ , so	<del>1/2</del> of 40 is 8	<del>1/2</del> of 40 is 32	
$40 \div 10 = 4$ , so	<del>1/10</del> of 40 is 4	<del>7/10</del> of 40 is 28	<del>3/10</del> of 40 is 12
$40 \div 8 = 5$ , so	<del>1/8</del> of 40 is 5	<del>5/8</del> of 40 is 25	<del>3/8</del> of 40 is 40