

Home Learning: Year 6 Maths

We have set out each week's learning as a series of suggested daily activities. However, the time may look very different for each family. Building in time to look after each other, be physical, creative and relax is as important as completing the set activities. You need to decide what works for you and your family. You could do more of the activities on one day and fewer on another, or you may find it helpful to have a more structured approach. It may help to give clear times for doing activities and clear times for breaks. You will also notice that some of the science, history and DT activities are the same and therefore can be done as a family.

Year 6	Day 1	Day 2	Day 3	Day 4	Day 5
Factual Fluency	Interpret pie charts https://uk.ixl.com/math/year-6/pie-charts	https://phet.colorado.edu/sims/html/fractions-equality/latest/fractions-equality_en.html	https://mathsframe.co.uk/en/resources/resource/120/match_fractions_decimals_and_percentages#.UCdc2MsCEY Start at level 1 and work your way up.	https://mathsframe.co.uk/en/resources/resource/51/bar_charts Bar charts Level 1 and 2	https://mathsframe.co.uk/en/resources/resource/51/bar_charts Bar charts level 3
Four Days of Reasoning (Monday-Thursday)	Summer Term Week 3 (w/c 4 th May) https://whiterosemaths.com/homelearning/year-6/ Extension Tasks are below for pupils who normally work with Mrs T OR who have competed the daily task and feel like a challenge	Click onto the link each day. There is a video to watch for each day and then activities to complete. White Rose is an excellent resource and one often used by teachers in our schools. As you support your child, you will see that it presents concepts clearly and incrementally. The lessons will start very simply – however, we do not recommend that you race ahead; spend time on the straightforward before moving onto more complex, abstract ideas. If you feel your child needs greater challenge click onto this link https://whiterosemaths.com/homelearning/year-7/ If your child struggles with maths, they could work on the learning set for year groups lower down the school.	Worksheets and answers can be found below.		
Friday	Revise aspects of this week's learning that you are not sure of sure of. You can simply repeat a lesson or revisit questions and redo. You could also attempt the Y7 lessons on the White Rose link.				

Home Learning: Year 6 English

Year 6	Day 1	Day 2	Day 3	Day 4	Day 5
Reading	<p>Make sure you have some quiet time for daily reading of your own book. Record your reading in your Reading Record as you normally do. Check out https://www.ccht.rbkc.sch.uk/learning-at-home/story-time/ for some on-line stories and some good book recommendations.</p>				
Writing	<p>LO: Read Poems for Meaning This week, you are going to be looking more closely at a number of poems. You are going to think about the main ideas of the poems and experiment with the ideas/ techniques the poets use. Read <i>These are the Hands</i> by Michael Rosen.</p> <p>Part One This poem was written to help children understand how the NHS medical care works and honour the service in its 60th year. What do you notice about the structure of the poem?</p> <p>Part Two Think about another organisation/ institution you could write about using the idea of the function of hands: e.g. school/ supermarket/ post office Write a list of all the functions hands might perform in that organisation: e.g. the hands in a school could write out a maths sum. Now organise them into a poem using the structure of Michael Rosen's poem.</p>	<p>LO: To Read Poems for Meaning Read <i>Gameplay</i> by Kwame Alexander. Part One Consider the following questions:</p> <ul style="list-style-type: none"> • What do you think the poem is about? • How does the poem make you feel? • What makes you feel like this? • Why do you think the poet has chosen to write about this event? <p>Re-read the poem. Consider the following question.</p> <ul style="list-style-type: none"> • What words or phrases has the poet used that make an impact on you as a reader? • How do they help create atmosphere or evoke emotion? <p>Part Two Look at how the poem mirrors the energy and movement of a football/ soccer game by using powerful verbs. This poem is an acrostic poem because the bold letters spell out a word or phrase: soccer. Think about a sport or other leisure activity that you enjoy. What skills do you need to take part? What verbs might you use to describe what it involves? Note down your ideas. Write an acrostic poem inspired by <i>Gameplay</i> about your chosen sport.</p>	<p>LO: To Read Poems for Meaning Read <i>I Saw a Peacock with a Fiery Tail</i> by Anonymous.</p> <p>Part One This is a 'trick' poem: the trick is the two ways it can be understood - read a line at a time, or read from the middle of one line to the middle of the next. Read the poem in both ways.</p> <ul style="list-style-type: none"> • How does the meaning of the poem change depending on how you have read it? <p>Part Two Write a poem based on this one using one of the senses: e.g. I saw.../ I heard.../ I felt.../ I touched... You may want to think about what you can hear/see/smell when you go on a walk. If you find writing a 'trick' poem difficult, try writing a poem based upon one of the senses that reads in only 'one' way.</p>		

Home Learning: Year 6 Curriculum

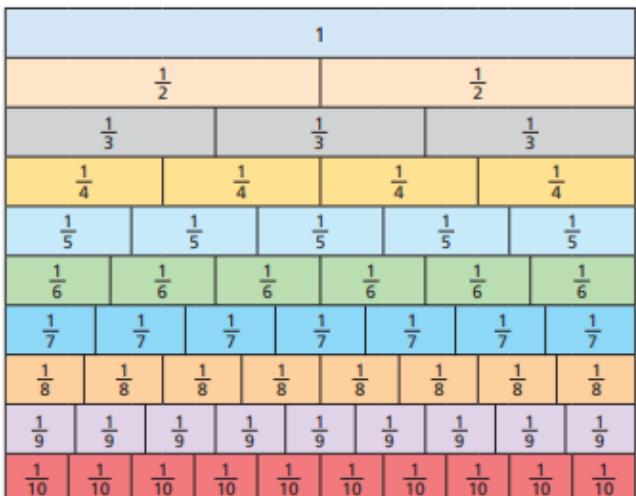
Day 1	Day 2	Day 3	Day 4	Day 5
Geography	Science	Art	RE	DT
<p>LO: research physical geographical features Where in the world are mountains and mountain ranges? (Look in an atlas / at a World map / on GoogleEarth). Choose a mountain range to focus on and answer these 4 questions:</p> <ul style="list-style-type: none"> • Where is your mountain range in the world? • What is the tallest mountain in your chosen mountain range? How is your mountain range used? (Work and leisure). • What makes your mountain range special? <p>Present your findings in any way you think appropriate.</p>	<p>LO: Explore Practical Uses of Electricity in the Home Look at this website. Can you find all the electrical hazards? Create a poster about electrical safety.</p> <ul style="list-style-type: none"> • Where might you find electrical hazards in the home? • Where might you find electrical hazards outside the home? • Explain why electricity and water are a bad combination <p>Make your poster eye catching and appealing and try to use a catchphrase that is easy to remember.</p>	<p>This week we want you to create your own sketchbook. Look at the ideas for creating a sketchbook here.</p> <p>https://q1e.co.uk/data/dynamic/spaw/documents/Week%203%20Art%20Home%20learning.pdf</p> <p>Task: Choose any object from home and 1 of the challenges below to practise your careful looking (observation) and your observational drawing skills.</p> <p>Remember to upload your artwork to ClassDojo</p>	<p>Your class Virtue is Justice. There are many stories about Justice and Fairness in the Bible. Watch the video of the Unjust Judge.</p> <p>https://www.youtube.com/watch?v=Nhgd8R8nK4U</p> <p>Or this one about Solomon.</p> <p>https://www.youtube.com/watch?v=0seKLROc3s</p> <p>Write or type a prayer about Justice. Illustrate as well if you like. Share your prayer with your class teacher.</p>	<p>Bank holiday challenge We want you to help with cooking and baking this week, in any way you can.</p> <p>Choose 1 (or more!) of the ideas below and improve your cooking skills this week.</p> <p>Make sure you ask an adult for permission before trying any of the cooking challenges.</p>
<i>Everything is Interesting – are you ready for a challenge?</i>				

Day 1

Simplify fractions



1



Use the fraction wall to write each fraction in its simplest form.

a) $\frac{4}{6} = \square$

c) $\frac{6}{8} = \square$

b) $\frac{8}{10} = \square$

d) $\frac{4}{8} = \square$

2

- a) Use a fraction wall to explain why $\frac{7}{10}$ does not simplify.

- b) Find three more fractions on the fraction wall that cannot be simplified.

3

- Mo, Eva and Ron are trying to simplify $\frac{5}{20}$



I can't simplify this because one number is odd and the other is even.

Mo



I can't simplify this because only one number can be halved.

Eva



I can simplify any fraction.

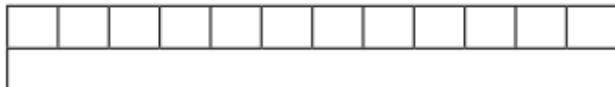
Ron

Do you fully agree, partly agree or completely disagree with each person?

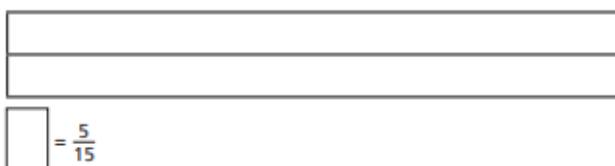
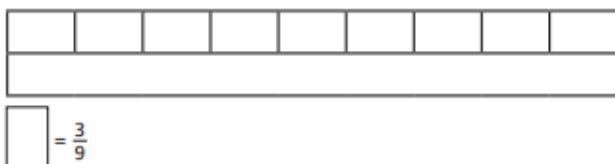
Talk to a partner.



- 4 a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



- b) Complete each bar model and calculation.



- 5 Simplify the fractions.

a) $\frac{4}{12} = \square$ b) $\frac{8}{12} = \square$ c) $\frac{40}{120} = \square$ d) $\frac{12}{4} = \square$

$\frac{4}{16} = \square$ $\frac{8}{16} = \square$ $\frac{40}{160} = \square$ $\frac{120}{4} = \square$

$\frac{4}{20} = \square$ $\frac{8}{20} = \square$ $\frac{40}{200} = \square$ $\frac{12}{400} = \square$

Describe and explain any patterns that you noticed.



- 6 Write 3 fractions that simplify to $\frac{3}{5}$

- 7 Teddy and Dora are both simplifying $\frac{30}{42}$

Teddy
 $\frac{30}{42} = \frac{15}{21} = \frac{5}{7}$

Dora
 $\frac{30}{42} = \frac{5}{7}$

- a) How do you think Dora was able to simplify the fraction in one step?
b) Simplify these fractions in one step.

$\frac{24}{30} = \square$ $\frac{16}{20} = \square$

$\frac{56}{64} = \square$ $\frac{99}{121} = \square$

- 8 is a prime number. is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.



Day 2

Compare and order (denominator)

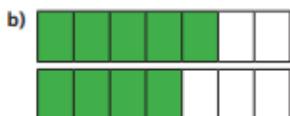


- 1 Write <, > or = to compare the fractions.

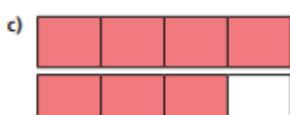
Use the bar models to help you.



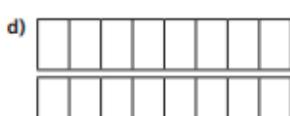
$\frac{1}{5} \bigcirc \frac{3}{5}$



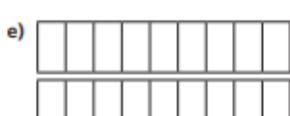
$\frac{5}{7} \bigcirc \frac{4}{7}$



$\frac{4}{4} \bigcirc \frac{3}{4}$



$\frac{3}{8} \bigcirc \frac{7}{8}$



$\frac{4}{9} \bigcirc \frac{6}{9}$

- f) What do you notice about your answers?

- g) Complete the sentence.

When the denominators are the same, the _____

the numerator, the _____ the fraction.

- 2 a) Colour the bar models to show the fractions.

$\frac{14}{20}$

$\frac{9}{10}$

$\frac{4}{5}$

$\frac{3}{4}$

- b) Use the bar models to sort these fractions in order from greatest to smallest.

$\frac{14}{20}$ $\frac{9}{10}$ $\frac{4}{5}$ $\frac{3}{4}$



greatest

smallest

- c) Order the fractions from smallest to greatest.

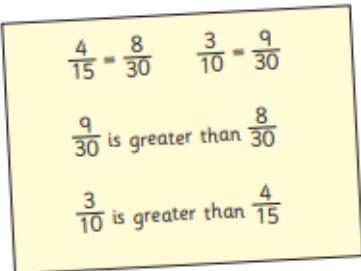
$\frac{7}{10}$ $\frac{1}{2}$ $\frac{2}{5}$ $\frac{3}{10}$



smallest

greatest

- 3 Amir is comparing the fractions $\frac{4}{15}$ and $\frac{3}{10}$



Explain Amir's method.

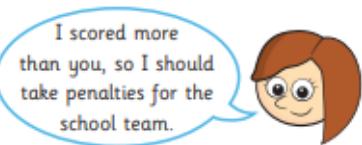
- 4 Ron and Rosie are practising penalties.

Ron scored 7 out of 10.

Rosie scored 23 out of 30



I did not miss as many as you, so I should take the penalties.



I scored more than you, so I should take penalties for the school team.

Compare fractions to explain who should take penalties for the school team.

- 5 Write $<$, $>$ or $=$ to compare the fractions.

a) $\frac{3}{4} \bigcirc \frac{5}{6}$

d) $\frac{3}{5} \bigcirc \frac{5}{7}$

b) $\frac{2}{3} \bigcirc \frac{5}{9}$

e) $\frac{9}{10} \bigcirc \frac{3}{4}$

c) $\frac{2}{3} \bigcirc \frac{7}{8}$

f) $\frac{9}{10} \bigcirc \frac{19}{20}$

- 6 Annie, Tommy and Kim are making flags for the school fair.

Annie has completed $3\frac{3}{4}$ flags, Tommy has completed $3\frac{2}{3}$ flags and Kim has completed $\frac{18}{5}$ flags.

Who has completed the most flags?



Compare and order (numerator)

- 1 Use strips of paper to represent the fractions and complete the sentences.

a) $\frac{1}{3}$, $\frac{1}{5}$ and $\frac{1}{6}$

The smallest fraction is The greatest fraction is

b) $\frac{2}{3}$, $\frac{2}{5}$ and $\frac{2}{6}$

The smallest fraction is The greatest fraction is

c) $\frac{3}{3}$, $\frac{3}{5}$ and $\frac{3}{6}$

The smallest fraction is The greatest fraction is

d) What do you notice about your answers?

e) Complete the sentence.

When the _____ are the same, the _____ the denominator, the _____ the fraction.



- 2 a) Colour the bar models to compare $\frac{3}{4}$ and $\frac{6}{10}$



- b) Write <, > or = to complete the statement.



- 3 Which is the greatest fraction? Circle your answer.

$\frac{3}{100}$

$\frac{3}{1000}$

$\frac{3}{500}$

How do you know?



- 4 Write < or > to compare the fractions.

a) $\frac{1}{7}$ $\frac{1}{9}$

d) $\frac{11}{12}$ $\frac{11}{11}$

b) $\frac{4}{5}$ $\frac{4}{7}$

e) $\frac{19}{5}$ $\frac{19}{6}$

c) $\frac{3}{13}$ $\frac{3}{8}$

f) $\frac{107}{53}$ $\frac{107}{40}$



5

Explain how you can compare $\frac{2}{3}$ and $\frac{4}{5}$ using the same numerator rule.

Complete the sentence to compare $\frac{2}{3}$ and $\frac{4}{5}$

is greater than

6

Scott scored 20 out of 24 in a game.

Dani scored 5 out of 7

Compare their scores.

Explain who you think did best and why.



7

Write <, > or = to complete each statement.

a) $\frac{2}{5} \bigcirc 1\frac{1}{3}$ b) $\frac{2}{5} \bigcirc \frac{6}{11}$ c) $3\frac{2}{3} \bigcirc \frac{11}{4}$

$1\frac{2}{5} \bigcirc \frac{1}{3}$ $1\frac{2}{5} \bigcirc 3\frac{6}{11}$ $11\frac{2}{9} \bigcirc \frac{101}{3}$

$1\frac{2}{5} \bigcirc 1\frac{1}{3}$ $3\frac{2}{5} \bigcirc 3\frac{6}{11}$ $11\frac{1}{9} \bigcirc \frac{100}{8}$

$\frac{12}{5} \bigcirc \frac{12}{3}$ $\frac{12}{5} \bigcirc \frac{36}{11}$ $27\frac{3}{4} \bigcirc \frac{111}{3}$

8

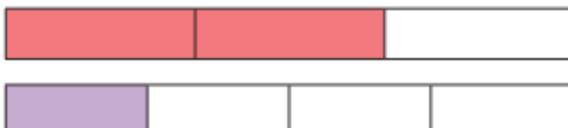
Explain how you know when it is best to compare the numerators or denominators of two fractions.



Add and subtract fractions (2)

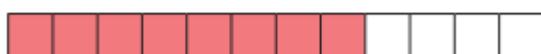


- 1 Amir is using fraction strips to work out $\frac{2}{3} + \frac{1}{4}$



Amir says he needs to find a common denominator.

- a) Complete Amir's method.



$$\frac{2}{3} = \frac{\square}{12}$$



$$\frac{1}{4} = \frac{\square}{12}$$

$$\frac{2}{3} + \frac{1}{4} = \frac{\square}{12} + \frac{\square}{12} = \frac{\square}{12}$$

- b) Show the addition on the fraction strip.



- c) Could you have used a different denominator?

- 2 What common denominator can you use to add the fractions?

a) $\frac{2}{5} + \frac{1}{2}$

Common denominator =

b) $\frac{2}{3} + \frac{4}{5}$

Common denominator =

c) $\frac{7}{8} - \frac{1}{4}$

Common denominator =

d) $\frac{7}{9} - \frac{1}{6}$

Common denominator =

e) $\frac{11}{15} + \frac{3}{10}$

Common denominator =

- 3 Ron and Eva are working out $\frac{1}{4} + \frac{5}{6}$

Ron's method

$$\frac{1}{4} + \frac{5}{6} = \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$$

Eva's method

$$\frac{1}{4} + \frac{5}{6} = \frac{6}{24} + \frac{20}{24} = \frac{26}{24}$$

- a) What is the same about Ron's and Eva's methods?

- b) What is different about their methods?

- c) Which method do you prefer? Why?

- 4 Complete the calculations.

a) $\frac{1}{5} + \frac{3}{4} =$

c) $\frac{1}{2} - \frac{1}{7} =$

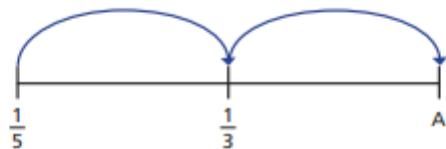
b) $\frac{7}{8} - \frac{1}{3} =$

d) $\frac{11}{18} + \frac{7}{12} =$



- 5 Mo is drawing jumps on a number line.

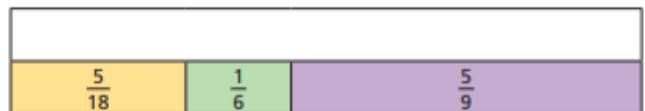
The jumps are the same size.



- a) What is the size of the jump?

- b) What is the value of A?

- 6 Complete the bar model.



- 7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

a) $\frac{4}{5} + \frac{5}{4} =$ = c) $\frac{9}{8} + \frac{8}{9} =$ =

b) $\frac{2}{3} + \frac{3}{2} =$ = d) = = $\frac{5}{3} + \frac{3}{5}$

What patterns do you notice?

- 8 Look at these additions.

$$\frac{1}{2} + \frac{1}{3} =$$

$$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} =$$

$$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} =$$

- a) When does this pattern first give an answer greater than 2?

- b) Do you think the pattern will ever give an answer greater than 100?



Mixed addition and subtraction



1 Work out the calculations.

a) $\frac{2}{5} + \frac{3}{4} = \boxed{}$

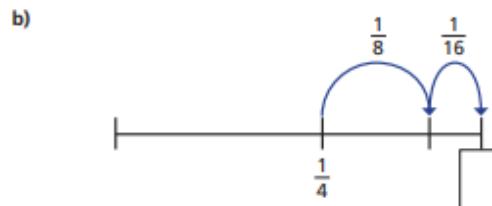
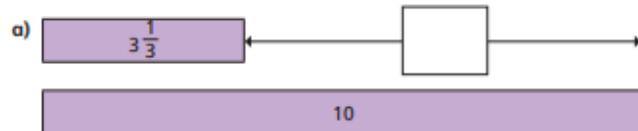
b) $2\frac{1}{4} - \frac{2}{3} = \boxed{}$

c) $3\frac{7}{10} - 2\frac{1}{4} = \boxed{}$

2 Complete the calculation.

$$\frac{5}{6} + 1\frac{2}{9} - \frac{1}{2} = \boxed{}$$

3 Work out the missing fractions.



4 Complete the calculations.

a) $\frac{2}{5} + \frac{1}{5} + \boxed{} = 1$

b) $\frac{2}{5} + \frac{1}{5} + \boxed{} = 1\frac{1}{2}$

c) $\frac{2}{5} + \frac{1}{5} + \boxed{} = \frac{4}{3}$

d) $\frac{4}{5} = \boxed{} - \frac{4}{5}$

- 5 Which of these are true and which are false?

Can you decide without having to do the additions or the subtractions?

Talk about your reasons with a partner.

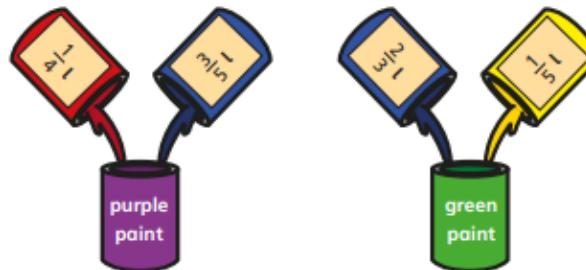
	True or false?
$2\frac{1}{3} + 3\frac{3}{4}$ is equal to $3\frac{1}{3} + 2\frac{3}{4}$	
$3\frac{3}{4} - 1\frac{1}{3}$ is less than $4\frac{3}{4} - 1\frac{1}{3}$	
$3\frac{3}{4} - 2\frac{1}{3}$ is equal to $3\frac{1}{3} - 2\frac{3}{4}$	

- 6 Complete the addition grid.

$1\frac{1}{4}$		$\frac{1}{4}$	$= 3\frac{3}{5}$
$\frac{1}{25}$	$1\frac{3}{20}$		$= 3\frac{39}{100}$
	$1\frac{1}{50}$	$1\frac{3}{100}$	$= 5\frac{9}{20}$
II	II	II	

- 7 A painter uses the following mixtures.

How much more green paint does she have than purple paint?

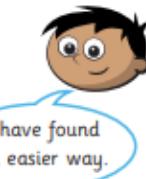


- 8 Eva and Amir are working out this calculation.

$$\frac{1}{4} + \frac{25}{100} - \frac{2}{8} - \frac{9}{36}$$



This is going
to be very difficult, because
I can't find a common
denominator.



I have found
an easier way.

Find Amir's solution. Explain how this calculation can be solved.

1) Answers

Simplify fractions

1

Use the fraction wall to write each fraction in its simplest form.

a) $\frac{4}{6} = \boxed{\frac{2}{3}}$

b) $\frac{8}{10} = \boxed{\frac{4}{5}}$

c) $\frac{6}{8} = \boxed{\frac{3}{4}}$

d) $\frac{4}{8} = \boxed{\frac{1}{2}}$

2 a) Use a fraction wall to explain why $\frac{7}{10}$ does not simplify.
It is already in its simplest form.

b) Find three more fractions on the fraction wall that cannot be simplified.

e.g. $\boxed{\frac{2}{3}}$, $\boxed{\frac{3}{7}}$, $\boxed{\frac{9}{10}}$

3 Mo, Eva and Ron are trying to simplify $\frac{5}{20}$

Mo: I can't simplify this because one number is odd and the other is even.

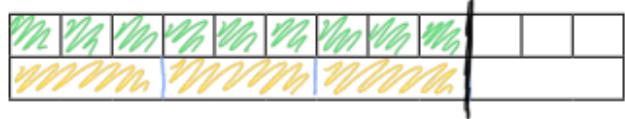
Eva: I can't simplify this because only one number can be halved.

Ron: I can simplify any fraction.

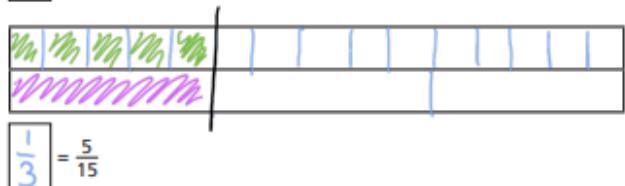
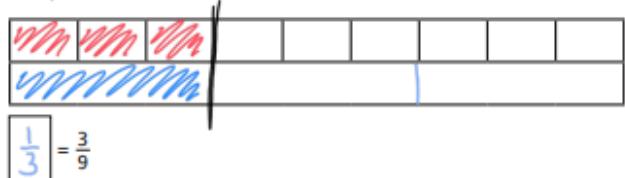
Do you fully agree, partly agree or completely disagree with each person?
Talk to a partner.

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- 4 a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



- b) Complete each bar model and calculation.



- 5 Simplify the fractions.

a) $\frac{4}{12} = \boxed{\frac{1}{3}}$ b) $\frac{8}{12} = \boxed{\frac{2}{3}}$ c) $\frac{40}{120} = \boxed{\frac{1}{3}}$ d) $\frac{12}{4} = \boxed{3}$

$\frac{4}{16} = \boxed{\frac{1}{4}}$ $\frac{8}{16} = \boxed{\frac{1}{2}}$ $\frac{40}{160} = \boxed{\frac{1}{4}}$ $\frac{120}{4} = \boxed{30}$

$\frac{4}{20} = \boxed{\frac{1}{5}}$ $\frac{8}{20} = \boxed{\frac{2}{5}}$ $\frac{40}{200} = \boxed{\frac{1}{5}}$ $\frac{12}{400} = \boxed{\frac{3}{100}}$

Describe and explain any patterns that you noticed.

Various answers



- 6 Write 3 fractions that simplify to $\frac{3}{5}$

e.g. $\boxed{\frac{6}{10}}$

$\boxed{\frac{9}{15}}$

$\boxed{\frac{12}{20}}$

- 7 Teddy and Dora are both simplifying $\frac{30}{42}$

Teddy
 $\frac{30}{42} = \frac{15}{21} = \frac{5}{7}$

Dora
 $\frac{30}{42} = \frac{5}{7}$

- a) How do you think Dora was able to simplify the fraction in one step?
b) Simplify these fractions in one step.

$\frac{24}{30} = \boxed{\frac{4}{5}}$ $\frac{16}{20} = \boxed{\frac{4}{5}}$
 $\frac{56}{64} = \boxed{\frac{7}{8}}$ $\frac{99}{121} = \boxed{\frac{9}{11}}$

- 8 is a prime number. is a multiple of 10

The fraction can be simplified.

What could each number be? Explain your reasoning.

Eg. 2 is prime, 20 is a multiple of 10
and $\frac{2}{20} = \frac{1}{10}$

so star could be 2 and heart could be 20



2)

Compare and order (denominator)

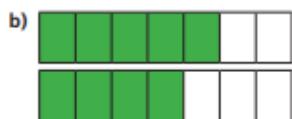


- 1) Write <, > or = to compare the fractions.

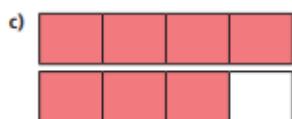
Use the bar models to help you.



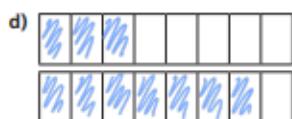
$$\frac{1}{5} \text{ } \left(\begin{array}{c} < \\ \circ \end{array} \right) \text{ } \frac{3}{5}$$



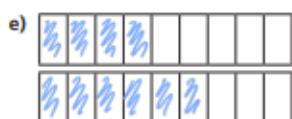
$$\frac{5}{7} \text{ } \left(\begin{array}{c} > \\ \circ \end{array} \right) \text{ } \frac{4}{7}$$



$$\frac{4}{4} \text{ } \left(\begin{array}{c} > \\ \circ \end{array} \right) \text{ } \frac{3}{4}$$



$$\frac{3}{8} \text{ } \left(\begin{array}{c} < \\ \circ \end{array} \right) \text{ } \frac{7}{8}$$



$$\frac{4}{9} \text{ } \left(\begin{array}{c} < \\ \circ \end{array} \right) \text{ } \frac{6}{9}$$

- f) What do you notice about your answers?

- g) Complete the sentence.

When the denominators are the same, the greater
the numerator, the greater the fraction. (or smaller / smaller)

- 2) a) Colour the bar models to show the fractions.



- b) Use the bar models to sort these fractions in order from greatest to smallest.

$$\frac{14}{20} \quad \frac{9}{10} \quad \frac{4}{5} \quad \frac{3}{4}$$

$\frac{9}{10}$

$\frac{4}{5}$

$\frac{3}{4}$

$\frac{14}{20}$

greatest

smallest

- c) Order the fractions from smallest to greatest.

$$\frac{7}{10} \quad \frac{1}{2} \quad \frac{2}{5} \quad \frac{3}{10}$$

$\frac{3}{10}$

$\frac{2}{5}$

$\frac{1}{2}$

$\frac{7}{10}$

smallest

greatest

- 3 Amir is comparing the fractions $\frac{4}{15}$ and $\frac{3}{10}$

$$\frac{4}{15} = \frac{8}{30} \quad \frac{3}{10} = \frac{9}{30}$$

$\frac{9}{30}$ is greater than $\frac{8}{30}$

$\frac{3}{10}$ is greater than $\frac{4}{15}$

Explain Amir's method.

Amir used equivalent fractions to find a common denominator and then compared the numerators.

- 4 Ron and Rosie are practising penalties.

Ron scored 7 out of 10.

Rosie scored 23 out of 30



I scored more than you, so I should take penalties for the school team.

I did not miss as many as you, so I should take the penalties.

Compare fractions to explain who should take penalties for the school team.

$$\frac{7}{10} = \frac{21}{30} \quad \frac{23}{30} > \frac{21}{30} \quad \text{Rosie should take penalties for the school team.}$$

- 5 Write $<$, $>$ or $=$ to compare the fractions.

a) $\frac{3}{4} \bigcirc \frac{5}{6}$

d) $\frac{3}{5} \bigcirc \frac{5}{7}$

b) $\frac{2}{3} \bigcirc \frac{5}{9}$

e) $\frac{9}{10} \bigcirc \frac{3}{4}$

c) $\frac{2}{3} \bigcirc \frac{7}{8}$

f) $\frac{9}{10} \bigcirc \frac{19}{20}$

- 6 Annie, Tommy and Kim are making flags for the school fair.

Annie has completed $3\frac{3}{4}$ flags, Tommy has completed $3\frac{2}{3}$ flags and Kim has completed $\frac{18}{5}$ flags.

Who has completed the most flags?

$$\frac{18}{5} = 3\frac{3}{5} \quad \frac{3}{4} > \frac{2}{3} > \frac{3}{5}$$

Annie has completed the most flags



Compare and order (numerator)

- 1 Use strips of paper to represent the fractions and complete the sentences.

a) $\frac{1}{3}$, $\frac{1}{5}$ and $\frac{1}{6}$

The smallest fraction is $\boxed{\frac{1}{6}}$

The greatest fraction is $\boxed{\frac{1}{3}}$

b) $\frac{2}{3}$, $\frac{2}{5}$ and $\frac{2}{6}$

The smallest fraction is $\boxed{\frac{2}{6}}$

The greatest fraction is $\boxed{\frac{2}{3}}$

c) $\frac{3}{3}$, $\frac{3}{5}$ and $\frac{3}{6}$

The smallest fraction is $\boxed{\frac{3}{6}}$

The greatest fraction is $\boxed{\frac{3}{3}}$

d) What do you notice about your answers?

e) Complete the sentence.

When the numerators are the same, the greater the denominator, the smaller the fraction. (or smaller/greater)



- 2 a) Colour the bar models to compare $\frac{3}{4}$ and $\frac{6}{10}$



- b) Write <, > or = to complete the statement.

$\frac{3}{4} \boxed{>} \frac{6}{10}$ or $\frac{6}{10} < \frac{3}{4}$

- 3 Which is the greatest fraction? Circle your answer.

$\frac{3}{100}$ $\boxed{\frac{3}{1,000}}$ $\frac{3}{500}$

How do you know?

- 4 Write < or > to compare the fractions.

a) $\frac{1}{7} \boxed{>} \frac{1}{9}$ d) $\frac{11}{12} \boxed{<} \frac{11}{11}$

b) $\frac{4}{5} \boxed{>} \frac{4}{7}$ e) $\frac{19}{5} \boxed{>} \frac{19}{6}$

c) $\frac{3}{13} \boxed{<} \frac{3}{8}$ f) $\frac{107}{53} \boxed{<} \frac{107}{40}$



- 5 Explain how you can compare $\frac{2}{3}$ and $\frac{4}{5}$ using the same numerator rule.

$$\frac{2}{3} = \frac{4}{6} \quad \frac{4}{6} < \frac{4}{5} \quad \text{so} \quad \frac{2}{3} < \frac{4}{5}$$

Complete the sentence to compare $\frac{2}{3}$ and $\frac{4}{5}$

$\frac{4}{5}$ is greater than $\frac{2}{3}$

- 6 Scott scored 20 out of 24 in a game.

Dani scored 5 out of 7

Compare their scores.

Explain who you think did best and why.

Scott: $\frac{20}{24} = \frac{5}{6}$ $\frac{5}{6} > \frac{5}{7}$ so Scott did better.

Dani: $\frac{5}{7}$



- 7 Write $<$, $>$ or $=$ to complete each statement.

a) $\frac{2}{5} \bigcirc 1\frac{1}{3}$ b) $\frac{2}{5} \bigcirc \frac{6}{11}$ c) $3\frac{2}{3} \bigcirc \frac{11}{4}$

$1\frac{2}{5} \bigcirc \frac{1}{3}$ $1\frac{2}{5} \bigcirc 3\frac{6}{11}$ $11\frac{2}{9} \bigcirc \frac{101}{3}$

$1\frac{2}{5} \bigcirc 1\frac{1}{3}$ $3\frac{2}{5} \bigcirc 3\frac{6}{11}$ $11\frac{1}{9} \bigcirc \frac{100}{8}$

$\frac{12}{5} \bigcirc \frac{12}{3}$ $\frac{12}{5} \bigcirc \frac{36}{11}$ $27\frac{3}{4} \bigcirc \frac{111}{3}$

- 8 Explain how you know when it is best to compare the numerators or denominators of two fractions.

When the lowest common multiple of either the numerators or denominators is easier to find.

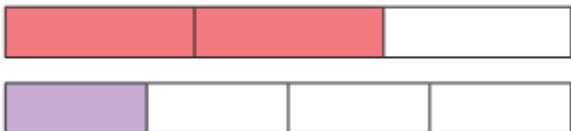


3)

Add and subtract fractions (2)

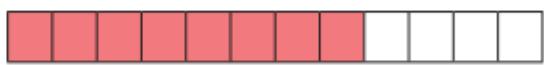


- 1 Amir is using fraction strips to work out $\frac{2}{3} + \frac{1}{4}$



Amir says he needs to find a common denominator.

- a) Complete Amir's method.



$$\frac{2}{3} = \frac{8}{12}$$



$$\frac{1}{4} = \frac{3}{12}$$

$$\frac{2}{3} + \frac{1}{4} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$

- b) Show the addition on the fraction strip.



- c) Could you have used a different denominator?

- 2 What common denominator can you use to add the fractions?

a) $\frac{2}{5} + \frac{1}{2}$

Common denominator =

b) $\frac{2}{3} + \frac{4}{5}$

Common denominator =

c) $\frac{7}{8} - \frac{1}{4}$

Common denominator =

d) $\frac{7}{9} - \frac{1}{6}$

Common denominator =

e) $\frac{11}{15} + \frac{3}{10}$

Common denominator =

- 3 Ron and Eva are working out $\frac{1}{4} + \frac{5}{6}$

Ron's method

$$\frac{1}{4} + \frac{5}{6} = \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$$

Eva's method

$$\frac{1}{4} + \frac{5}{6} = \frac{6}{24} + \frac{20}{24} = \frac{26}{24}$$

- a) What is the same about Ron's and Eva's methods?

They both found a common denominator.

- b) What is different about their methods?

They used a different common denominator.

- c) Which method do you prefer? Why?

4 Complete the calculations.

a) $\frac{1}{5} + \frac{3}{4} = \boxed{\frac{19}{20}}$

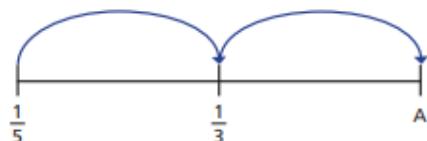
c) $\frac{1}{2} - \frac{1}{7} = \boxed{\frac{5}{14}}$

b) $\frac{7}{8} - \frac{1}{3} = \boxed{\frac{13}{24}}$

d) $\frac{11}{18} + \frac{7}{12} = \boxed{1\frac{7}{36}}$

5 Mo is drawing jumps on a number line.

The jumps are the same size.



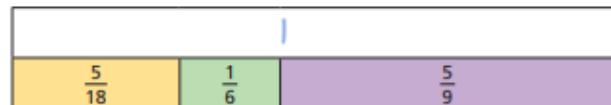
a) What is the size of the jump?

$\boxed{\frac{2}{15}}$

b) What is the value of A?

$\boxed{\frac{7}{15}}$

6 Complete the bar model.



7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

a) $\frac{4}{5} + \frac{5}{4} = \boxed{\frac{41}{20}} = \boxed{2\frac{1}{20}}$

d) $\frac{9}{8} + \frac{8}{9} = \boxed{\frac{145}{72}} = \boxed{2\frac{1}{72}}$

b) $\frac{2}{3} + \frac{3}{2} = \boxed{\frac{13}{6}} = \boxed{2\frac{1}{6}}$

d) $\boxed{2\frac{4}{15}} = \boxed{\frac{34}{15}} = \frac{5}{3} + \frac{3}{5}$

What patterns do you notice?

8 Look at these additions.

$\frac{1}{2} + \frac{1}{3} = \boxed{}$

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} = \boxed{}$

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} = \boxed{}$

a) When does this pattern first give an answer greater than 2?

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6} + \frac{1}{7} + \frac{1}{8} + \frac{1}{9} + \frac{1}{10} + \frac{1}{11}$

b) Do you think the pattern will ever give an answer greater than 100?

4)

Mixed addition and subtraction



1 Work out the calculations.

a) $\frac{2}{5} + \frac{3}{4} = \boxed{\frac{3}{20}}$

b) $2\frac{1}{4} - \frac{2}{3} = \boxed{\frac{7}{12}}$

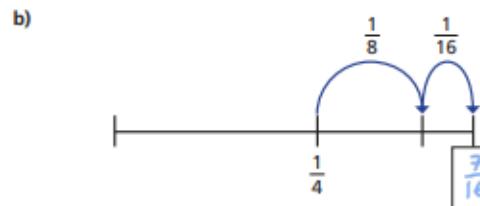
c) $3\frac{7}{10} - 2\frac{1}{4} = \boxed{\frac{9}{20}}$

2 Complete the calculation.

$$\frac{5}{6} + 1\frac{2}{9} - \frac{1}{2} = \boxed{\frac{5}{9}}$$

3 Work out the missing fractions.

a) $3\frac{1}{3}$ ← → $6\frac{2}{3}$
 ↓
 10



4 Complete the calculations.

a) $\frac{2}{5} + \frac{1}{5} + \boxed{\frac{2}{5}} = 1$

b) $\frac{2}{5} + \frac{1}{5} + \boxed{\frac{9}{10}} = 1\frac{1}{2}$

c) $\frac{2}{5} + \frac{1}{5} + \boxed{\frac{11}{15}} = \frac{4}{3}$

d) $\frac{4}{5} = \boxed{\frac{13}{15}} - \frac{4}{5}$

- 5 Which of these are true and which are false?

Can you decide without having to do the additions or the subtractions?

Talk about your reasons with a partner.

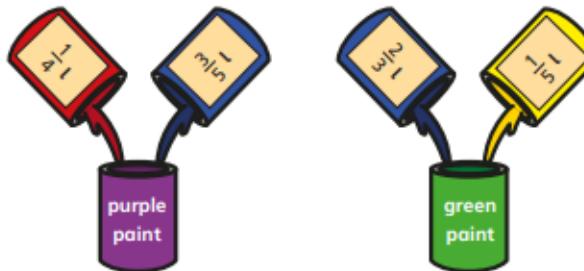
	True or false?
$2\frac{1}{3} + 3\frac{3}{4}$ is equal to $3\frac{1}{3} + 2\frac{3}{4}$	True
$3\frac{3}{4} - \frac{1}{3}$ is less than $4\frac{3}{4} - 1\frac{1}{3}$	False
$3\frac{3}{4} - 2\frac{1}{3}$ is equal to $3\frac{1}{3} - 2\frac{3}{4}$	False

- 6 Complete the addition grid.

$1\frac{1}{4}$	$2\frac{1}{10}$	$\frac{1}{4}$	$= 3\frac{3}{5}$
$\frac{1}{25}$	$1\frac{3}{20}$	$2\frac{1}{5}$	$= 3\frac{39}{100}$
$3\frac{2}{5}$	$1\frac{1}{50}$	$1\frac{3}{100}$	$= 5\frac{9}{20}$
II	II	II	
$4\frac{69}{100}$	$4\frac{27}{100}$	$3\frac{12}{25}$	

- 7 A painter uses the following mixtures.

How much more green paint does she have than purple paint?



$\frac{1}{60}$

- 8 Eva and Amir are working out this calculation.

$$\frac{1}{4} + \frac{25}{100} - \frac{2}{8} - \frac{9}{36}$$



This is going
to be very difficult, because
I can't find a common
denominator.



I have found
an easier way.

Find Amir's solution. Explain how this calculation can be solved.

All four fractions are equivalent to $\frac{1}{4}$ so the
answer is 0

Day 1: These Are the Hands by Michael Rosen
for the 60th anniversary of the NHS

These are the hands
That touch us first
Feel your head
Find the pulse
And make your bed.

These are the hands
That tap your back
Test the skin
Hold your arm
Wheel the bin
Change the bulb
Fix the drip
Pour the jug
Replace your hip.

These are the hands
That fill the bath
Mop the floor
Flick the switch
Soothe the sore
Burn the swabs
Give us a jab
Throw out sharps
Design the lab.

And these are the hands
That stop the leaks
Empty the pan
Wipe the pipes
Carry the can
Clamp the veins
Make the cast
Log the dose
And touch us last.

Day 3: Gameplay by Kwame Alexander

on the pitch, lightning fast,
dribble, fake, then make a dash

player tries to steal the ball
lift and step and make him fall

zip and zoom to find the spot
defense readies for the shot

chip, then kick it in the air
take off like a Belgian hare

shoot it left, but watch it curve
all he can do is observe

watch the ball bend in midflight
play this game far into night

Day 4: I Saw a Peacock with a Fiery Tail by Anonymous (before 1665)

About this poem

This is a 'trick' poem: the trick is the two ways it can be understood -read a line at a time, or read from the middle of one line to the middle of the next, e.g. *I saw a peacock, with a fiery tail. With a fiery tail, I saw a blazing comet. I saw a blazing comet, drop down hail. Drop down hail...*

These following are to be understood in two ways.

I saw a Peacock, with a fiery tail,
I saw a Blazing Comet, drop down hail,
I saw a Cloud, with Ivy circled round,
I saw a sturdy Oak, creep on the ground,
I saw a **Pismire**, swallow up a Whale,
I saw a raging Sea, brim full of Ale,
I saw a Venice Glass, Sixteen foot deep,
I saw a well, full of men's tears that weep,
I saw their eyes, all in a flame of fire,
I saw a House, as big as the Moon and higher,
I saw the Sun, even in the midst of night,
I saw the man, that saw this wondrous sight.

pismire is an old word for an ant



DT Cooking Challenge

Choose 1 or more of these challenges and get cooking!

Get your breakfast (and lunch) ready by yourself every day this week.

Create a new smoothie flavour.

Peel the vegetables for dinner every day.

Make your own ice lollies.

Make a recipe that is someone in your family's favourite treat/snack/meal.

Find a recipe from another country and culture that you would like to try.

Plan a whole balanced meal for your family. Or even plan 3 days worth of meals.

Prepare a meal/sandwich with as many different colours as possible.

Make a meal with foods that all start with the same letter.

Make a fruit salad.

Cook/bake something in a muffin tin.

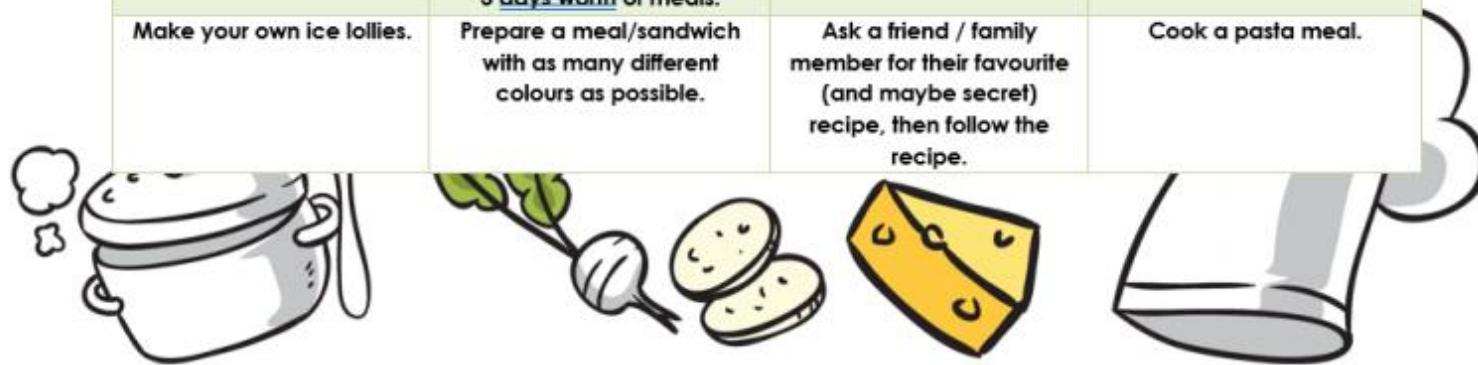
Ask a friend / family member for their favourite (and maybe secret) recipe, then follow the recipe.

Try to create a snack based on a book, a film or a song.

Learn how to cook a vegetable in 2 different ways.

Get breakfast/lunch ready for your whole family.

Cook a pasta meal.



Mrs T's Maths Groups - Year 6
Week beginning: 4th May 2020

Day 1.) LO: Fraction, Decimals & Percentages

Click on the following link: <https://nrich.maths.org/1249>

Task: Play Level 1 of the interactive game, then challenge yourself by seeing further below the page for the more advanced levels.

Day 2.) LO: Solving Number Puzzles using Trial & Improvement or Algebra

Click on the following link: <https://nrich.maths.org/2129>

Task: Work out the puzzling number(s)

Days 3 & 4) LO: Number Tricks

Click on the following link: <https://nrich.maths.org/alwaysamultiple>

Task: Watch the videos and have a go at the activities.

Day 5.) LO: Solve Simple Algebraic Equations

Click on the following link and watch video:

<https://www.youtube.com/watch?v=l3XzepN03KQ>

Task: Click on the following link:

https://www.math-drills.com/algebra/algebra_solve_onestep_equation_easy_001.php

Solve simple equations NOT by using the inverse, but by using the balancing method shown in the video. It is important to learn how to balance equations as more complex equations cannot be solved by the inverse method you would normally use.