

YEAR 6 WEEKLY LEARNING MAT 5

MATHS ZONE

Keep your times table knowledge in check!
Collect points on Maths shed
<https://www.mathshed.com/en-gb>

Practise your times tables with a game of bowling!



<https://mathsframe.co.uk/en/resources/resource/504/Sup-er-Maths-Bowling-Multiplication>

Revise fractions from White Rose

<https://whiterosemaths.com/home/earning/year-6/>

Summer Term - Week 3 (w/c 4th May)

Worksheets are now attached below the learning mat.

Revise Bidmas

Watch the video
https://www.youtube.com/watch?v=fawyXROE_ZY

Play this BIDMAS game with a friend, parent/ carer!
<https://www.transum.org/Maths/Game/BIDMAS/>

ENGLISH ZONE

How to use hyphens and dashes

<https://www.bbc.co.uk/bitesize/topics/zvwwxnb/articles/zg8gbk7>



How many hyphenated adjectives can you think of?

Spelling Frame

<https://spellingframe.co.uk/>
Want to improve your spelling why not try out the different activities within the

Spelling Tiles

FREE

The Troll



Read the story starter attached below the learning mat.

Could you continue to story?

TOPIC ZONE

Try the BBC Y6 daily lessons
<https://www.bbc.co.uk/bitesize/dailylessons>

Bitesize

Try Oak National Academy lessons

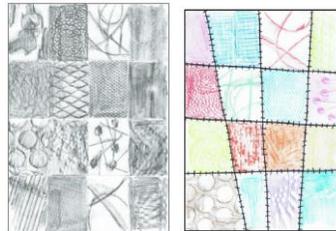


<https://www.thenationalacademy/online-classroom>

Textured treasures

Can you find different textures around your house and garden?

Using a wax crayon or the side of your pencil. Can you create rubbings of the different textures to make a patchwork quilt design?



Amazing America

Learn the different countries and capitals of North America.

<http://www.yourchildlearns.com/mappuzzle/north-america-puzzle.html>

Learn the different countries and capitals of South America.

<http://www.yourchildlearns.com/mappuzzle/south-america-puzzle.html>

<https://barefootgames.org/codecracking?ref=https://www.barefootcomputing.org/>



Can you crack the code?

Can you then make your own secret code and write a secret message for others to crack?

LEGO Challenge:

Can you recreate a famous American landmark: How about the..

Empire State building?

White House?

Chrysler building?

Golden gate bridge?

Can you share your learning on your class page



Keep your eye on the school blog for more fun activities to keep you busy!

Story starter!

Thump! He slammed his enormous, grass-covered foot into the middle of the road, sending shockwaves of dust in all directions.

With a loud grunt, the troll wrenched the entire, fully tiled roof off a nearby holiday home, with the owners peering helplessly and frightened out of the downstairs windows. He didn't mean any harm, but he just couldn't help himself...

Can you continue this story?

Question time!

What do you think the troll is thinking?

Do you think he is a mean or a kind troll? Why?

What are the people doing when they have seen the troll?

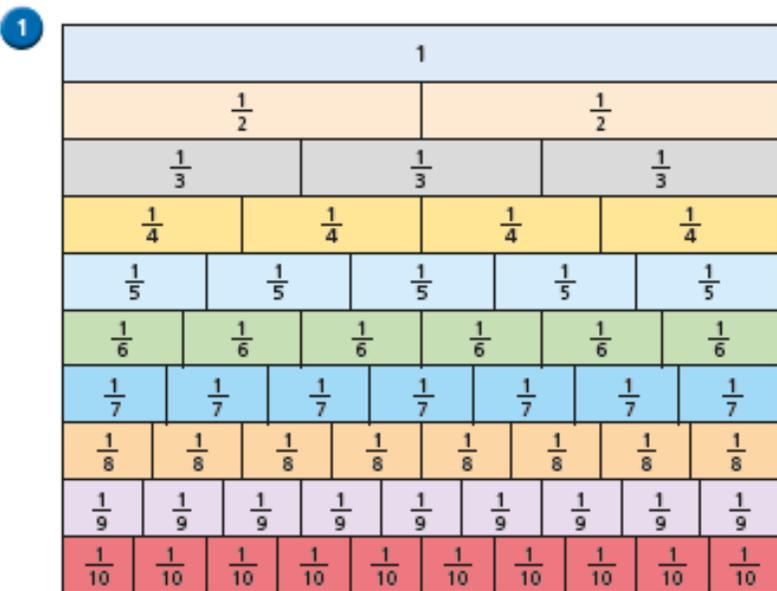
Would you try to catch him or talk to him?

Where do you think the troll has come from?

What do you think the rope around the troll's waist is for?



Simplify fractions



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.

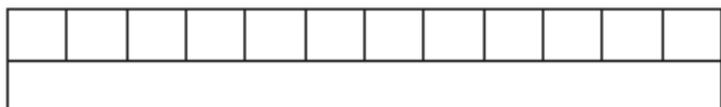
Ron

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

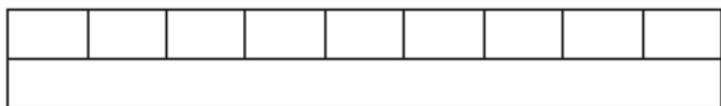
Talk to a partner.



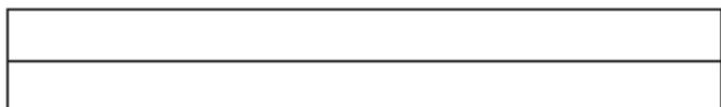
- 4 a) Draw lines on the bar model to show that $\frac{9}{12}$ is equal to $\frac{3}{4}$



- b) Complete each bar model and calculation.



$$\frac{\square}{\square} = \frac{3}{9}$$



$$\frac{\square}{\square} = \frac{5}{15}$$

- 5 Simplify the fractions.

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

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

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

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.

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

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

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

The fraction can be simplified.

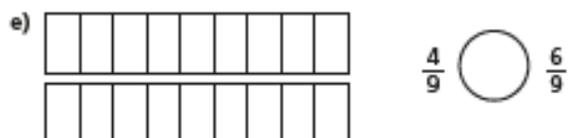
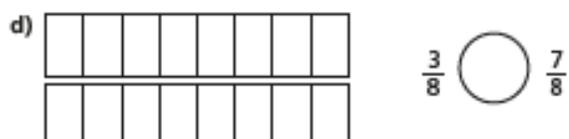
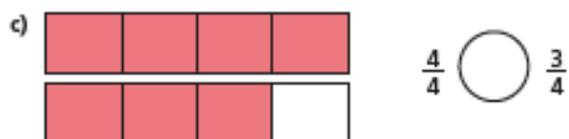
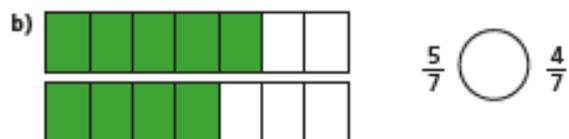
What could each number be? Explain your reasoning.



Compare and order (denominator)

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

Use the bar models to help you.



f) What do you notice about your answers?

g) Complete the sentence.

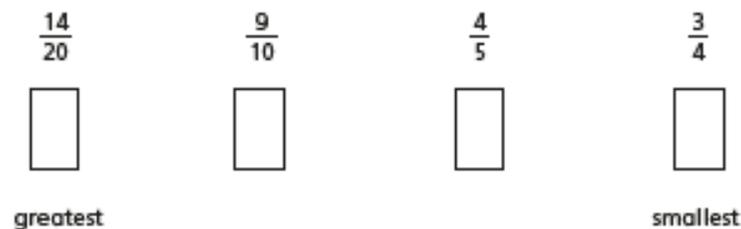
When the denominators are the same, the _____

the numerator, the _____ the fraction.

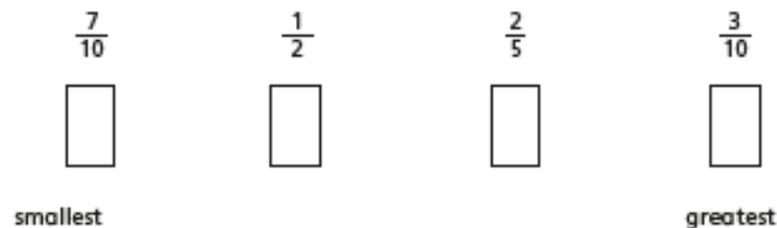
2 a) Colour the bar models to show the fractions.



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



c) Order the fractions from smallest to 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.

- 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.

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

a) $\frac{3}{4}$ ○ $\frac{5}{6}$

d) $\frac{3}{5}$ ○ $\frac{5}{7}$

b) $\frac{2}{3}$ ○ $\frac{5}{9}$

e) $\frac{9}{10}$ ○ $\frac{3}{4}$

c) $\frac{2}{3}$ ○ $\frac{7}{8}$

f) $\frac{9}{10}$ ○ $\frac{19}{20}$

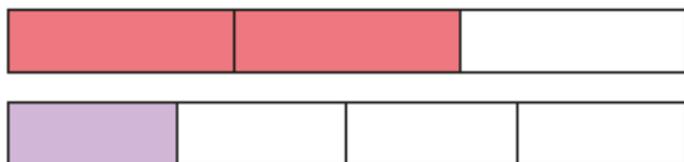
- 6 Annie, Tommy and Kim are making flags for the school fair.

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?

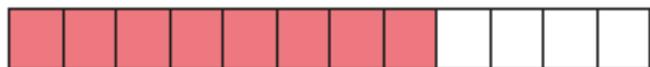
Add and subtract fractions (2)

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

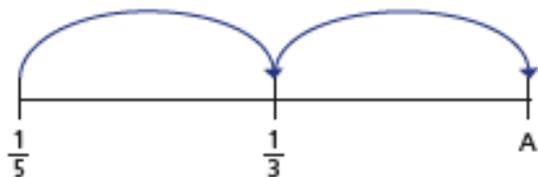
c) $\frac{1}{2} - \frac{1}{7} = \square$

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

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

5 Mo is drawing jumps on a number line.

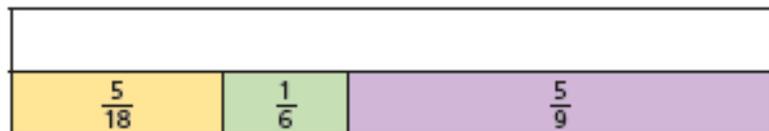
The jumps are the same size.



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

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

What patterns do you notice?

8 Look at these additions.

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

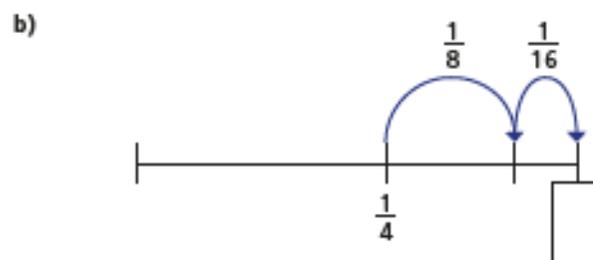
b) $2\frac{1}{4} - \frac{2}{3} = \square$

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

2 Complete the calculation.

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

3 Work out the missing fractions.



4 Complete the calculations.

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

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

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

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

- 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.

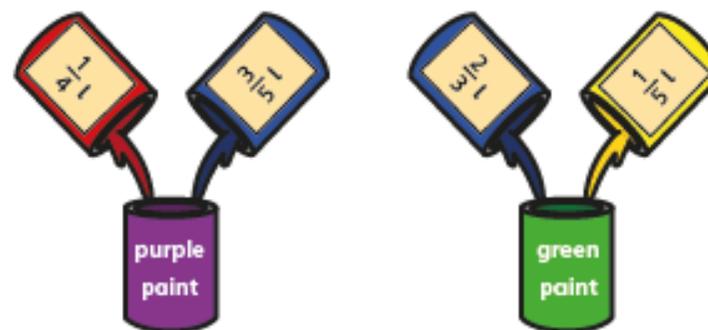
	True or false?
$2\frac{1}{3} + 3\frac{3}{4}$ is equal to $3\frac{1}{3} + 2\frac{3}{4}$	
$3\frac{3}{4} - \frac{1}{3}$ is less than $4\frac{3}{4} - 1\frac{1}{3}$	
$3\frac{3}{4} - 2\frac{1}{3}$ is equal to $3\frac{1}{3} - 2\frac{3}{4}$	

- 6 Complete the addition grid.

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