Year 6

Wednesday 6th May 2020

Maths

LO: to add and subtract fractions

Please note: this link only works on either pdf or the link above this powerpoint.
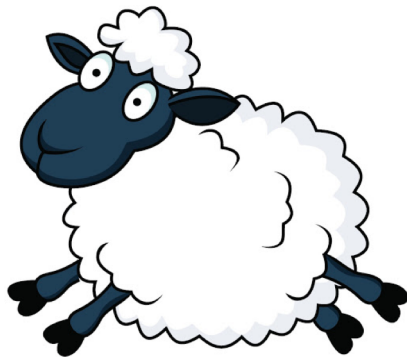 The video lesson is available here – Summer Term - Week 3 - lesson 3

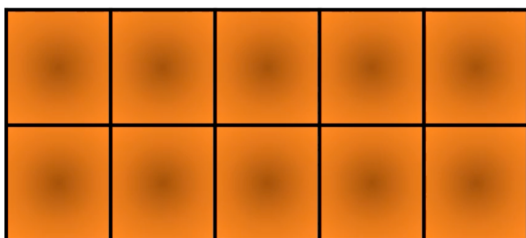## Starter - Brain Teaser

Six wolves catch six lambs in six minutes.

How many wolves will be needed to catch sixty lambs in sixty minutes?

No, the answer is not sixty. Try again!

Add and subtract fractions
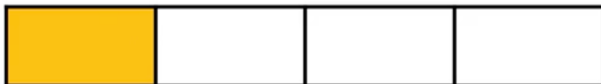

Have a go

Charlie eats $\frac{1}{5}$ of the chocolate bar.

Suzie eats $\frac{3}{10}$ of the chocolate bar.

How much have they eaten altogether?

2:

Use the bar models to solve.

$$\frac{7}{12} - \frac{1}{4} =$$

$$\frac{7}{12} + \frac{1}{4} =$$

3:

Here is a strip of paper.

$\frac{3}{5}$ of it will be shaded red.

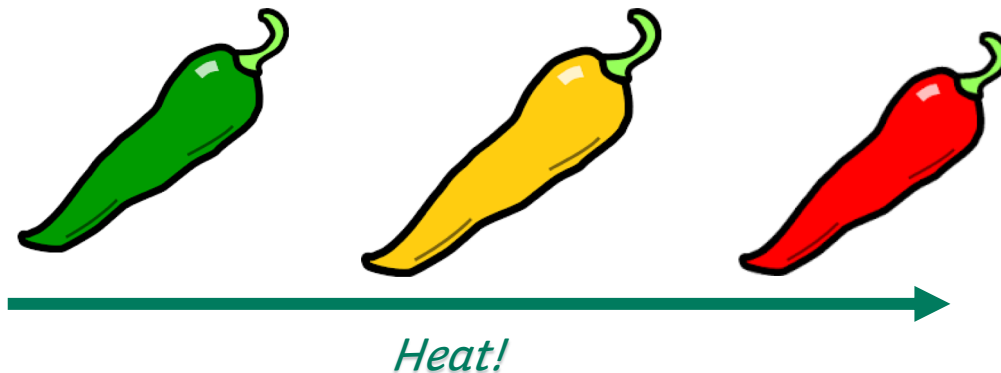$\frac{1}{2}$ of it will be shaded blue.

The rest will be left white.

What fraction will be left white?

Independent work

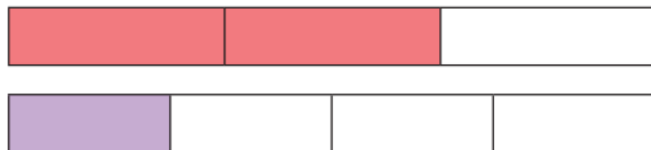Independent work continues on the following slide.

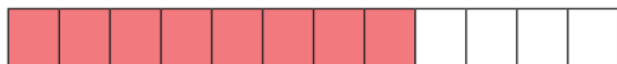There are 7 questions and 1 extension.

Heat!

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	Eva's method
$\frac{1}{4} + \frac{5}{6} = \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$	$\frac{1}{4} + \frac{5}{6} = \frac{6}{24} + \frac{20}{24} = \frac{26}{24}$

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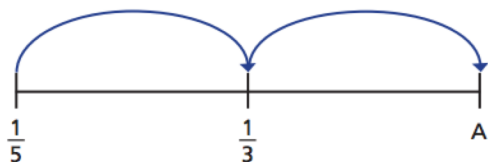
a) $\frac{1}{5} + \frac{3}{4} = \boxed{}$

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

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

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

5 Mo is drawing jumps on a number line.

The jumps are the same size.

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

a) What is the size of the jump?

b) What is the value of A?

6 Complete the bar model.

$\frac{5}{18}$	$\frac{1}{6}$	$\frac{5}{9}$
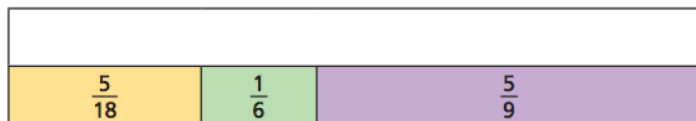
7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

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

c) $\frac{9}{8} + \frac{8}{9} = \boxed{} = \boxed{}$

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

d) $\boxed{} = \boxed{} = \frac{5}{3} + \frac{3}{5}$

What patterns do you notice?

EXT: 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?

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