Year 3 Maths – week beginning 18.5.2020					
Theme	**Fractions Lesson 6** **Finding equivalent fractions**	**Fractions Lesson 7** **Finding equivalent fractions**	**Fractions Lesson 8** **Finding equivalent fractions**	**Fractions Lesson 9** **Finding equivalent fractions**	**Fractions Lesson 10** **Finding equivalent fractions**
Factual fluency (to aid fluency)	What fraction does the shape show? Try this activity (10 questions)	Identifying halves, thirds and quarters activity (10 questions)	Identify the fraction activity (10 questions)	Understanding fraction bars activity (10 questions)	Finding equivalent fractions activity (10 questions)
Problem/ activity of the day Remember, just like in class, you can still show the depth of your knowledge Link	**Making links:** In Year 2 you folded a piece of paper to understand that some fractions which are written differently are the same. **Think:**  Madhi and Trish are very excited because Dad is ordering pizza for dinner tonight. Madhi wants to have $\frac{1}{2}$ of the pizza, whilst Trish wants $\frac{2}{4}$ of the pizza. Who will be getting more pizza? Is there any of that pizza left for Dad? **See: (model below)** **See video clip** **Do:** Have a go at making a fraction wall (see video) and using that wall to answer the questions below.	**Making links:** Yesterday we learned that some fractions can be **equivalent**. **Think:**  Some of Y3 think $\frac{1}{3}$ of the shape is green, whilst the rest of the class think $\frac{2}{6}$ of the shape is green. Who is correct? **See: (model below)** **Do:** Use the fraction walls to solve the problems below.	**Making links:** Yesterday, you learnt that some fractions have different numerators and denominators, but they are equal. They are equivalent fractions. **Think:** Take four strips of paper that are the same size as each other. Fold one piece of paper to show halves, one piece of paper to show quarters, one to show eighths and one to show sixths.  Now can you use your strips of paper to find any equivalent fractions? **See: (model below)** **See video clip** **Do:** Use what you have learnt to answer the questions below.	**Making links:** Yesterday, you used strips of paper and number lines to find equivalent fractions. **Think:** What are the equivalent fractions of $\frac{1}{2}$? Use a piece of paper to help you.  What do you notice about the numerators and denominators of equivalent fractions? Can you spot a pattern? **See: (model below)** **See video clip** **Do:** Use what you have learnt to answer the questions below.	**Making links:** Yesterday, you used pieces of paper and patterns to find equivalent fractions. **Think:** Is it possible to write $\frac{2}{3}$ as $\frac{8}{}$? Use a piece of paper to help you.  What does it mean when the numerator changes from 2 to 8? What operation did I have to do? What do I need to do to the denominator 3? **See: (model below)** **See video clip** **Do:** Use what you have learnt answer the questions below.
Time to check	Check answer sheet below	Check answer sheet below	Check answer sheet below	Check answer sheet below	Check answer sheet below

See below for resources to support you to THINK-SEE-DO

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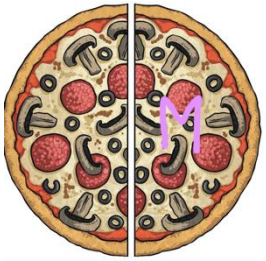
DAY 1 RESOURCES:

THINK:

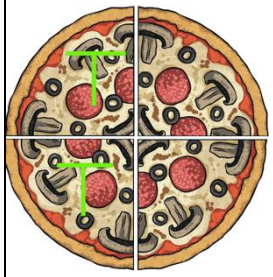
Madhi and Trish are very excited because Dad is ordering pizza for dinner tonight. Madhi wants to have $\frac{1}{2}$ of a pizza, whilst Trish wants $\frac{2}{4}$ of a pizza. Who will be getting more pizza? Is there any of that pizza left for Dad?

SEE: (see video)

The whole pizza is 1



Madhi wants $\frac{1}{2}$ of the pizza.



Trish wants $\frac{2}{4}$ of the pizza. This is the same amount that Madhi wanted.

Trish and Madhi had the same amount of pizza, and there was none left for Dad.

This shows that $\frac{1}{2} = \frac{2}{4}$, even though they have different numerators and denominators. We can also say that $\frac{1}{2}$ is **equivalent** to $\frac{2}{4}$.

The fraction wall on the right also shows that $\frac{1}{2} = \frac{2}{4}$ as they are the same size.

DO:

Fraction walls help us understand equivalent fractions. See this video to learn how to make one.

Use your own fraction wall, or the one above, to solve the problems below.

a) $\frac{1}{4} = \frac{\quad}{8}$

b) $\frac{2}{4} = \frac{\quad}{8}$

c) Two quarters is equivalent to one half. **True or False?**

d) Four quarters is equivalent to two eighths. **True or False?**

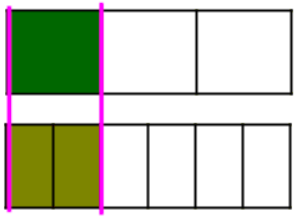
e) $\frac{1}{2} = \frac{\quad}{8}$

DAY 2 RESOURCES:

THINK:

Some of Year 3 think $\frac{1}{3}$ of the shape is green, whilst the rest of the class think $\frac{2}{6}$ of the shape is green. Who is correct?

SEE:



This is another example of equivalent fractions. All the Year 3 children are correct, firstly because both bars are green but also because the fractions are equivalent.

The first bar has $\frac{1}{3}$ shaded in dark green.

The second bar has $\frac{2}{6}$ shaded in light green.

The pink lines show that they are equal in size so must be equivalent. Even though the numerator and denominator are different, the fractions represent the same amount of the shape.

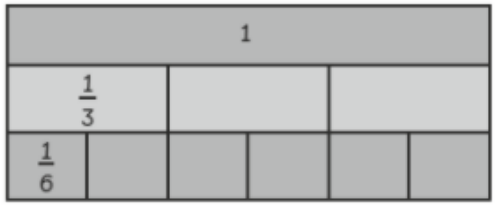
There are more equivalent fractions to $\frac{1}{3}$.

$\frac{1}{3} = \frac{2}{6} = \frac{4}{12}$

Can you spot a pattern with how the numbers are increasing?

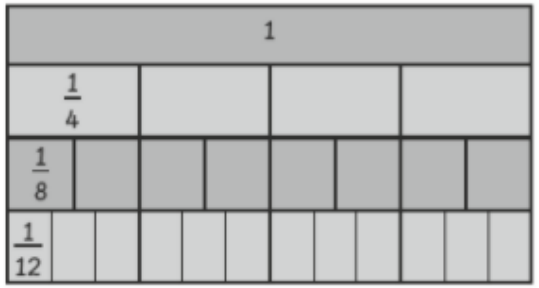
DO:

Use the fraction walls below to solve the problems.



a) $1 = \frac{\quad}{3}$

b) $\frac{2}{3} = \frac{\quad}{6}$



c) $1 = \frac{\quad}{4}$

d) $\frac{2}{4} = \frac{\quad}{8}$

e) $\frac{2}{4} = \frac{\quad}{12}$

f) How many equivalent fractions of $\frac{1}{2}$ can you think of?

g) How many equivalent fractions of $\frac{1}{3}$ can you think of?

Deepening: Jeremy had a cake for his birthday party. When only 2 of his friends turned up, he cut the cake into 3 equal pieces so he and his 2 friends could enjoy a piece of cake each. However, just as he had finished cutting, 3 more friends turned up. Can Jeremy share his 3 pieces of cake equally between 6 people?

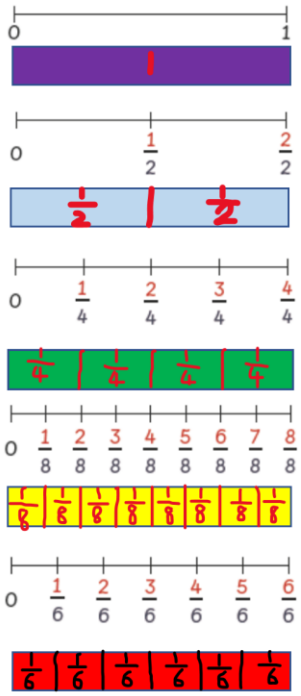
DAY 3 RESOURCES:

THINK:

Take four strips of paper that are the same size as each other. Fold one piece of paper to show halves, one piece of paper to show quarters, one to show eighths and one to show sixths.
Now can you use your strips of paper to find any equivalent fractions?

SEE: See video

We can use our strips of paper to help us to show fractions on a number line.
These can help us to identify equivalent fractions.



We can see from comparing the paper strips and number lines that:

$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$

These are equivalent fractions. They are equal.

We can also see that:

$\frac{1}{2} = \frac{3}{6}$

and

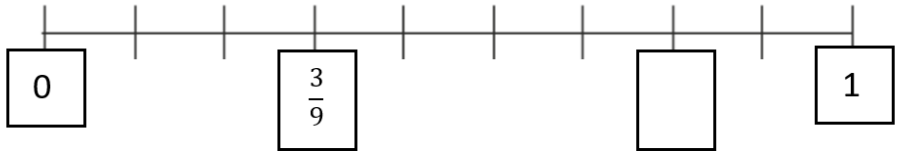
$\frac{1}{3} = \frac{2}{6}$

Can you find any more?

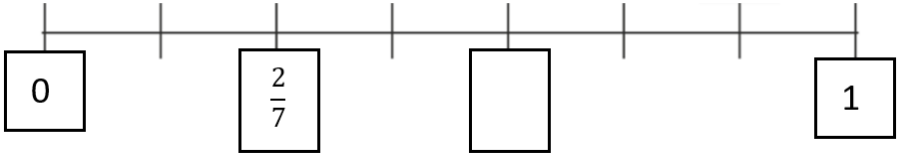
DO:

1. Complete each of the number lines below.

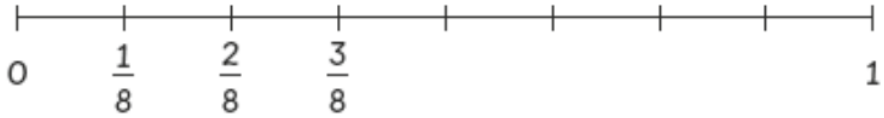
a)



b)



2. Label the fractions below on the number line.



a) $\frac{7}{8}$

b) $\frac{1}{2}$

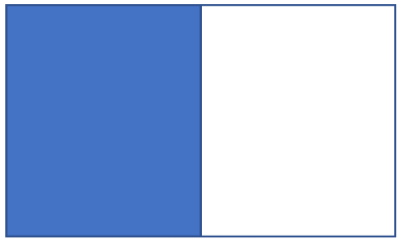
c) $\frac{3}{4}$

Answer sheet below.

DAY 4 RESOURCES:

THINK:

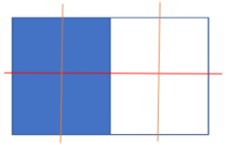
What are the equivalent fractions of $\frac{1}{2}$?
Use a piece of paper to help you.
What do you notice about the numerators and denominators of equivalent fractions?
Can you spot a pattern?



SEE: See video

$\frac{1}{2}$ of the shape is shaded.

When the shaded part becomes 2 equal parts, each part is a quarter or a fourth. I can see that $\frac{1}{2} = \frac{2}{4}$

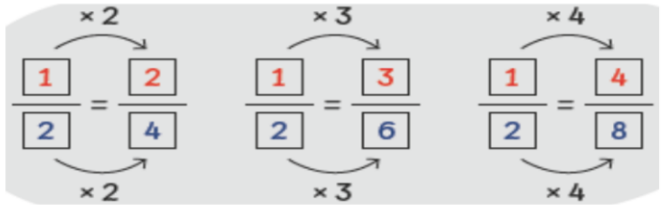


When the shaded part becomes 4 equal parts, each part is an eighth. I can see that $\frac{1}{2} = \frac{4}{8}$

When the shaded part becomes 3 equal parts, each part is a sixth. I can see that $\frac{1}{2} = \frac{3}{6}$

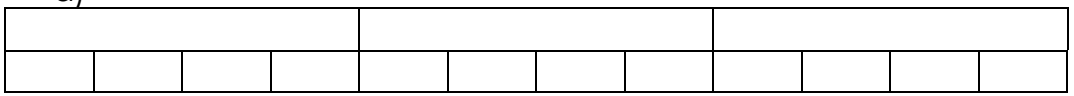
I spotted a pattern involving multiplication.

If I multiply the numerator and the denominator by the same number, it gives me an equivalent fraction.



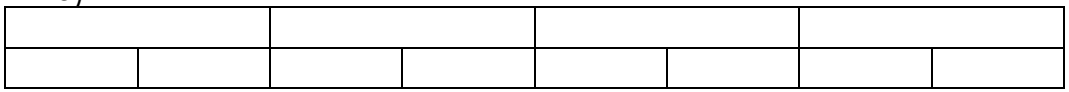
1. Find the equivalent fraction. Shade the rectangles to help you.

a)



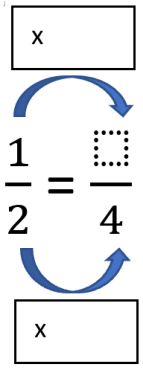
$\frac{1}{3} = \frac{}{12}$

b)

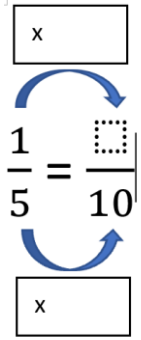


$\frac{1}{4} = \frac{}{8}$

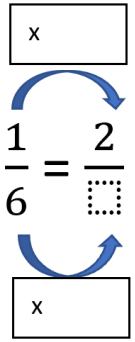
2. Fill in the blanks.



b)



c)



DAY 5 RESOURCES:

THINK: Is it possible to write $\frac{2}{3}$ as $\frac{8}{\ }$? Use a piece of paper to help you.

What does it mean when the numerator changes from 2 to 8? What operation did I have to do? What do I need to do to the denominator 3?

SEE: See video

With a piece of paper, divide it into 3 parts and shade in 2 of those parts – or you could draw a bar model using a ruler and shade in 2 parts.

$\frac{2}{3}$ of the shape is shaded.

To change the numerator from **2** to **8** we have change the 2 parts into **8 parts.**
We can do this by splitting each part into **4 parts**. I know this because **8 ÷ 2 = 4.**

The 2 parts become **8 equal parts.**
Each part is a **twelfth.**

We can see how to find the equivalent fraction using to $\frac{2}{3}$ using our times table knowledge here:

x 4

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

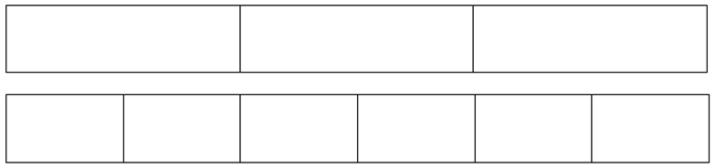
x 4

When finding equivalent fractions, we **multiply** the **numerator** and the **denominator** by the **same number.**

DO:

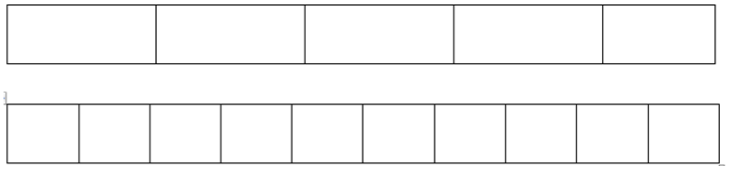
1. Find the missing denominators. **Shade the bars** to find the answers.

a)



$\frac{2}{3} = \frac{4}{\square}$

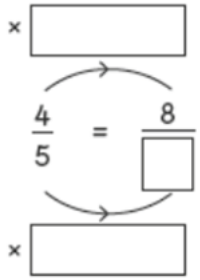
b)



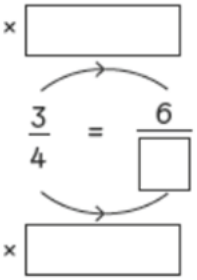
$\frac{2}{5} = \frac{4}{\square}$

2. Fill in the blanks.

(a)



(b)



(c) $\frac{5}{6} = \frac{10}{\square}$

(d) $\frac{2}{3} = \frac{8}{\square}$

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ANSWERS:

Day 1

a) $\frac{1}{4} = \frac{2}{8}$

b) $\frac{2}{4} = \frac{4}{8}$

c) Two quarters is equivalent to one half. **True**

d) Four quarters is equivalent to two eights. **False**

e) $\frac{1}{2} = \frac{4}{8}$

Day 2

a) $1 = \frac{3}{3}$

b) $\frac{2}{3} = \frac{4}{6}$

c) $1 = \frac{4}{4}$

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

e) $\frac{2}{4} = \frac{6}{12}$

f) $\frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{6}{12}$

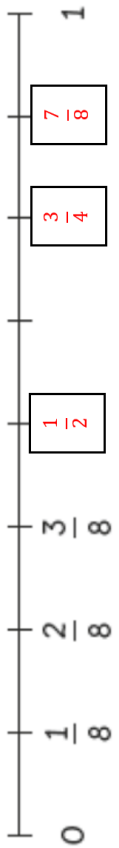
g) $\frac{2}{6}, \frac{3}{9}, \frac{4}{12}, \frac{5}{15}$

Day 3

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

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

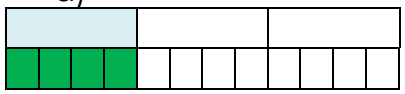
2.



Day 4

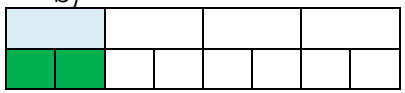
1.

a)



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

b)



$\frac{1}{4} = \frac{2}{8}$

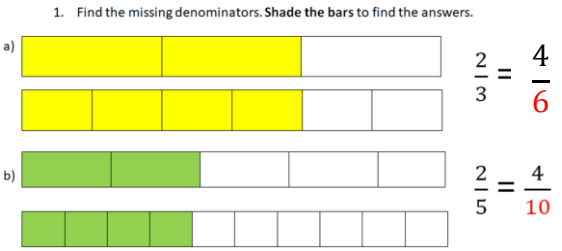
2.

a) $\frac{1}{2} = \frac{2}{4}$ (×2)

b) $\frac{1}{5} = \frac{2}{10}$ (×2)

c) $\frac{1}{6} = \frac{2}{12}$ (×2)

Day 5



2. Fill in the blanks.