IALT: explore equivalent fractions (R).
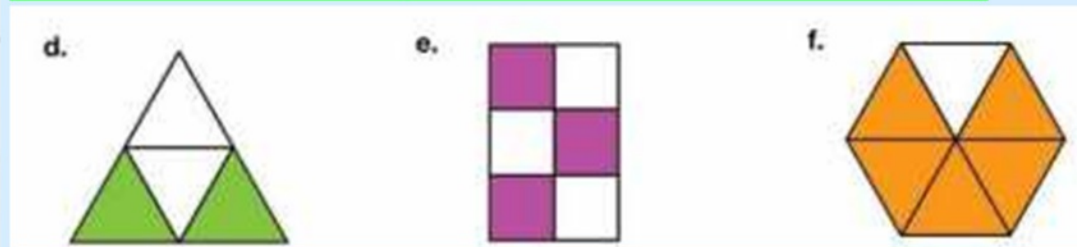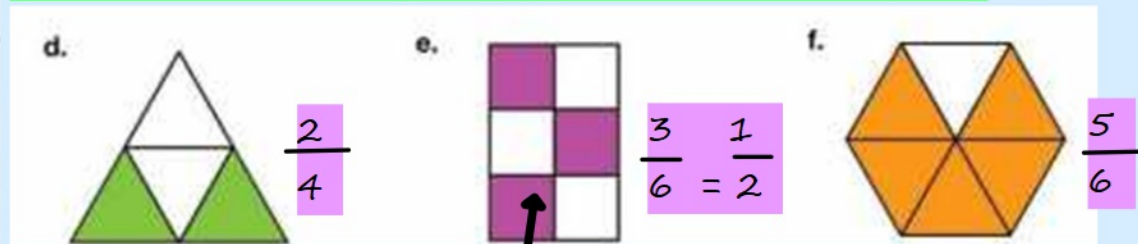
What is the fraction shaded?

d.

e.

f.

Which fractions are equivalent to a half? $\frac{1}{2}$

Challenge:

Bus Stop Division: 431 ÷ 2

https://www.topmarks.co.uk/maths-games/daily10

Long Mulitplication: 851 x 6

IALT: explore equivalent fractions (R).

What is the fraction shaded?

d.

$\frac{2}{4}$

e.

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

f.

$\frac{5}{6}$

Challenge:

Which fractions are equivalent to a half? $\frac{1}{2}$

Bus Stop Division: 431 ÷ 2 215 r1

https://www.topmarks.co.uk/maths-games/daily10

Long Mulitplication: 851 x 6 5106

Daily Counting

halves   thirds   quarters

Recap

What is a...

Denominator

unit fraction

Numerator

non unit fraction

EQUIVALENT

Can you think of any synonyms? **What does it mean?**

$$\frac{1}{2}$$

$$\frac{2}{4}$$

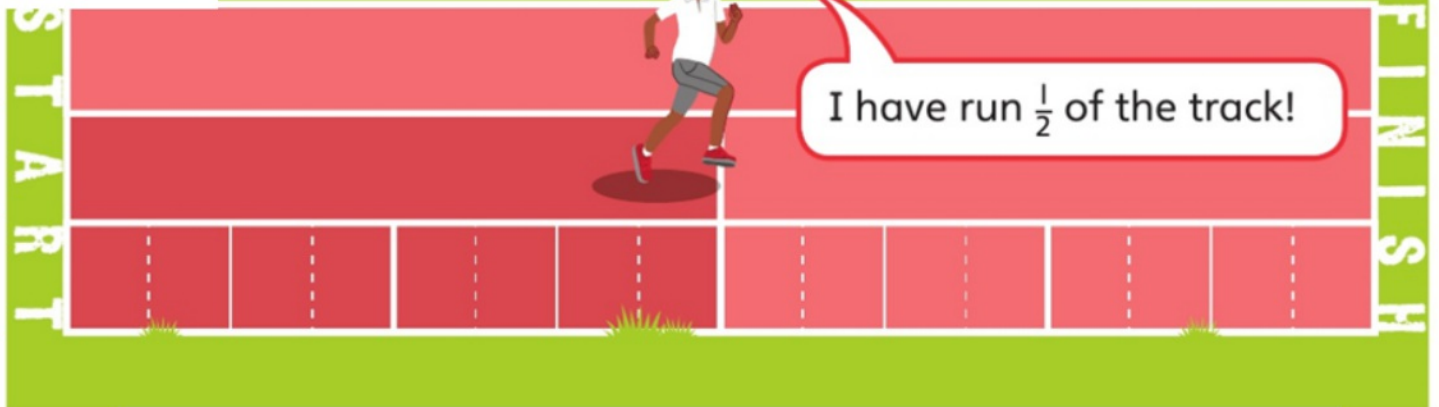Well done! You have run $\frac{2}{4}$ of the way!

Mr Lopez

Lee

I have run $\frac{1}{2}$ of the track!

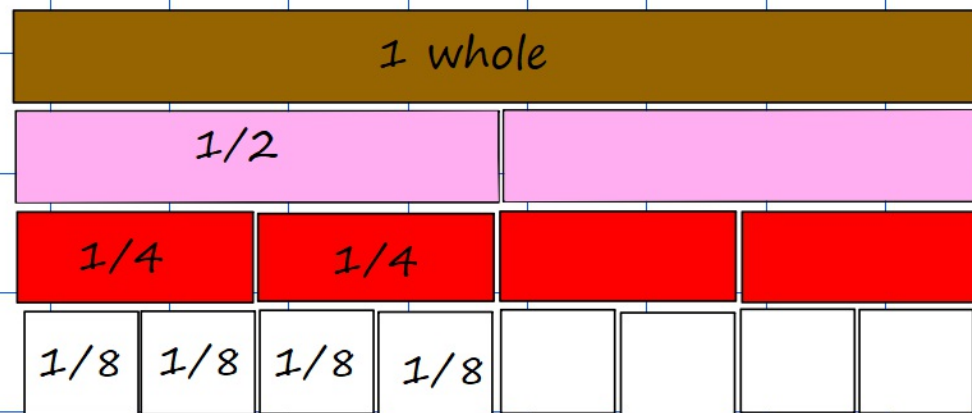Who is correct Lee or Mr Lopez?

Cuisennaire Rods

Have you used them before?
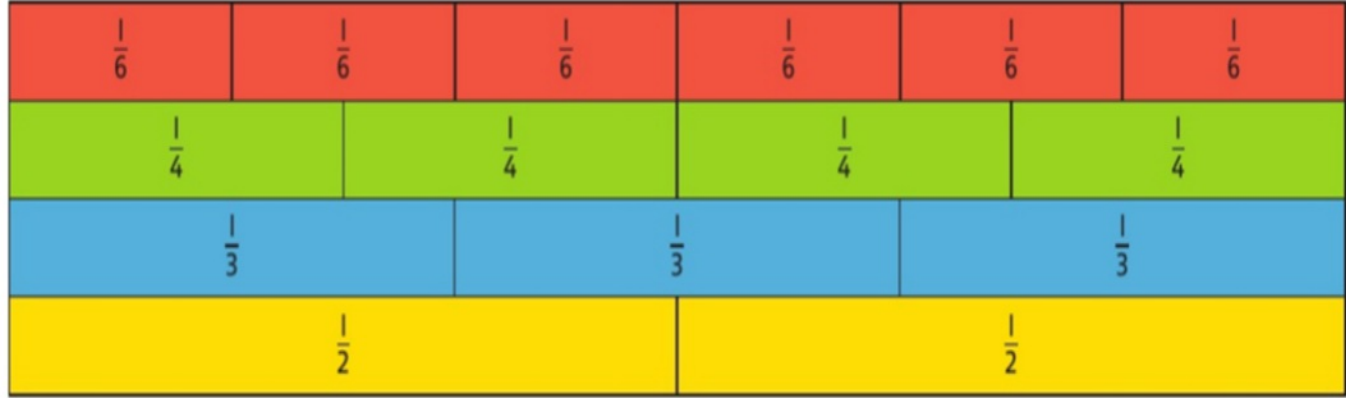
What did you use them for?

How were they useful?

We are going to use these symbols to help us understand fractions

1 whole

1/2	1/2

Find the equivalent to $\frac{1}{2}$ of the pink rod.

What fraction would it be? How can you prove it?

Is there more than one answer?

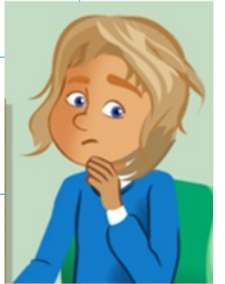| 1 whole | | | | | | | |
1/2				1/2			
1/4		1/4		1/4		1/4	
1/8	1/8	1/8	1/8				

Reena

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

Danny

$$\frac{1}{3} \quad \frac{}{}$$
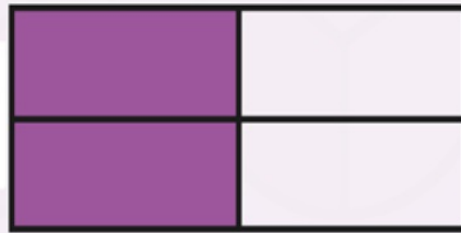
3 4 5 6

2 4 5 6

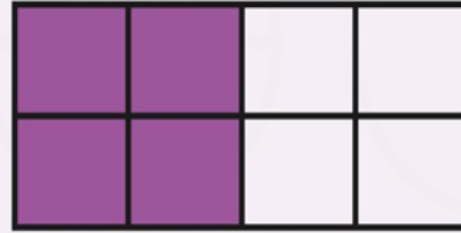$$\frac{\square}{\square} = \frac{\square}{\square}$$

What do you notice about the numerator and denominator?
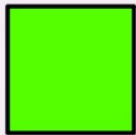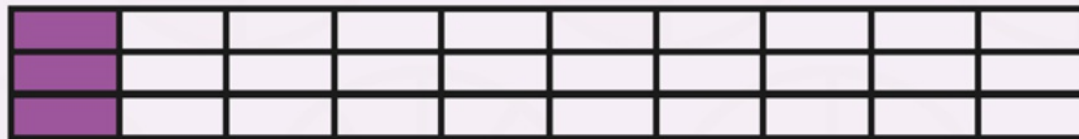
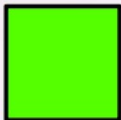What fraction is shaded?

$$\frac{2}{4} \quad \blacksquare\blacksquare = \blacksquare\blacksquare \quad \frac{4}{8}$$

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

What do you notice about the numerator and denominator?

What fraction is shaded?

What has changed to the numerator?

What has changed to the denominator?

$\frac{1}{10}$

What fraction is shaded?

$\frac{3}{30}$

$$\frac{1}{10} = \frac{3}{30}$$

×3

×3

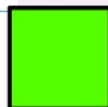What has changed to the numerator?

What has changed to the denominator?

$$\frac{1}{4}$$

Identify the fractions equivalent to $\frac{1}{4}$?

What has changed to the numerator? What has changed to the denominator?

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

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

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

$\frac{1}{4}$

$\frac{2}{8}$

$\frac{3}{12}$

$\frac{4}{16}$

Identify the fractions equivalent to $\frac{1}{4}$?

What has changed to the numerator? What has changed to the denominator?

x2
$$\frac{1}{4} = \frac{2}{8}$$
x2

x3
$$\frac{1}{4} = \frac{3}{12}$$
x3

x4
$$\frac{1}{4} = \frac{4}{16}$$
x4

Draw a line down the centre of your book

$$\overset{\times 2}{\frac{1}{2}} = \frac{2}{4} \underset{\times 2}{}$$

$$\overset{\times 5}{\frac{5}{10}} = \frac{1}{2} \underset{\times 5}{}$$

Leave a line

Leave a line

Mild:

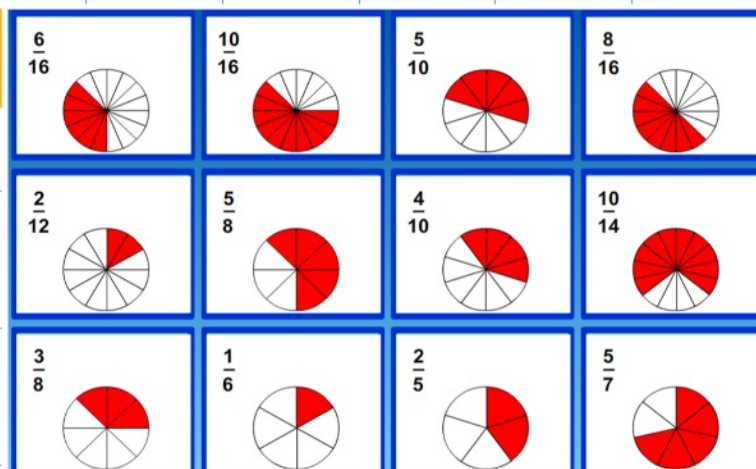Fold your paper into 3 equal parts. Colour in 1/3 of your paper.

$$\frac{\square}{3} = \frac{\square}{6}$$

Now fold it in half. How many equal parts do you have now? How many parts are shaded? How would we write this as a fraction? What do you notice?

Fold the paper strip into 5 equal parts shade in one part. What is the fraction? Fold your paper in half. How many equal parts do you have? How many are shaded? What is the fraction? Write an equivalent fraction for this?

$$\frac{\square\square}{} = \frac{\square\square}{}$$

Spicy:

$\frac{6}{16}$	$\frac{10}{16}$	$\frac{5}{10}$	$\frac{8}{16}$
$\frac{2}{12}$	$\frac{5}{8}$	$\frac{4}{10}$	$\frac{10}{14}$
$\frac{3}{8}$	$\frac{1}{6}$	$\frac{2}{5}$	$\frac{5}{7}$

Find matching pairs

HHH:

Order these fractions from smallest to largest:

$$\frac{3}{4} \qquad \frac{3}{5} \qquad \frac{9}{10} \qquad \frac{17}{20}$$

Choose one of the following symbols to make the number sentences correct:

$$<, > \text{ or } =$$

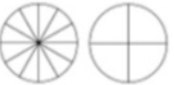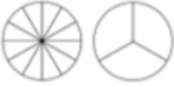$$\frac{1}{3} \ \square \ \frac{2}{5} \qquad \frac{3}{7} \ \square \ \frac{1}{3} \qquad \frac{2}{3} \ \square \ \frac{6}{9}$$

Explain how your times tables helps you find equivalent fractions

Complete the table. Can you spot any patterns?

Pictorial representation	Fraction	Words
	$\dfrac{6}{8} = \dfrac{3}{4}$	Six eighths is equivalent to three quarters
	$\dfrac{1}{3} = \dfrac{\square}{9}$	_____ is equivalent to _____
	$\dfrac{\square}{4} = \dfrac{\square}{12}$	Three twelfths is equivalent to _____ quarters
	$\dfrac{4}{12} = \dfrac{\square}{\square}$	_____ is equivalent to _____

Always, sometimes, never.

> If a fraction is equivalent to one half, the denominator is double the numerator.

Prove it.

Can you find any relationships between the numerator and denominator for other equivalent fractions?

Mild:

Fold your paper into 3 equal parts. Colour in 1/3 of your paper.
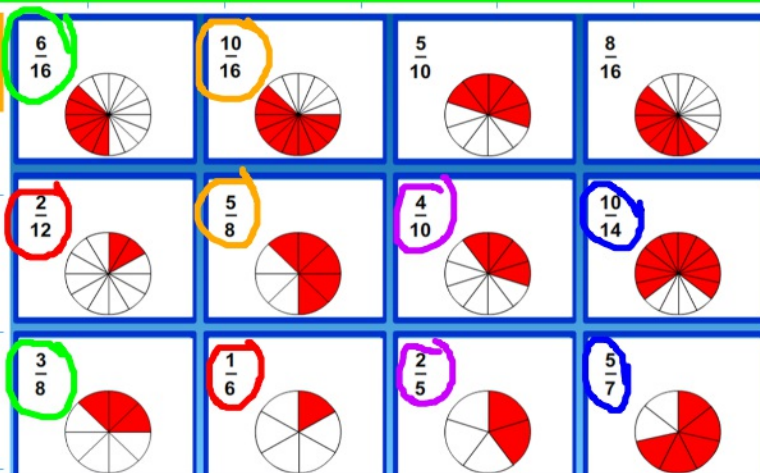
$$\frac{1}{3} = \frac{2}{6}$$

Now fold it in half. How many equal parts do you have now? How many parts are shaded? How would we write this as a fraction? What do you notice?

Fold the paper strip into 5 equal parts shade in one part. What is the fraction? Fold your paper in half. How many equal parts do you have? How many are shaded? What is the fraction? Write an equivalent fraction for this?

$$\frac{1}{5} = \frac{2}{10}$$

Spicy:

$\frac{6}{16}$	$\frac{10}{16}$	$\frac{5}{10}$	$\frac{8}{16}$
$\frac{2}{12}$	$\frac{5}{8}$	$\frac{4}{10}$	$\frac{10}{14}$
$\frac{3}{8}$	$\frac{1}{6}$	$\frac{2}{5}$	$\frac{5}{7}$

Find matching pairs

HHH:

Order these fractions from smallest to largest:

$$\frac{3}{4} \qquad \frac{3}{5} \qquad \frac{9}{10} \qquad \frac{17}{20}$$

3/5, 3/4, 17/20, 9/10

Choose one of the following symbols to make the number sentences correct:

$$< , > \text{ or } =$$

$$\frac{1}{3} \; < \; \frac{2}{5} \qquad \frac{3}{7} \; > \; \frac{1}{3} \qquad \frac{2}{3} \; = \; \frac{6}{9}$$

Mild:

Complete the table. Can you spot any patterns?

Pictorial representation	Fraction	Words
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	$\dfrac{1}{3} = \dfrac{\Box}{9}$	_____ is equivalent to _____
	$\dfrac{\Box}{4} = \dfrac{\Box}{12}$	Three twelfths is equivalent to _____ quarters
	$\dfrac{4}{12} = \dfrac{\Box}{\Box}$	_____ is equivalent to _____

Spicy:

Always, sometimes, never.

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Prove it.

Can you find any relationships between the numerator and denominator for other equivalent fractions?