

## Tuesday work with Miss Maths

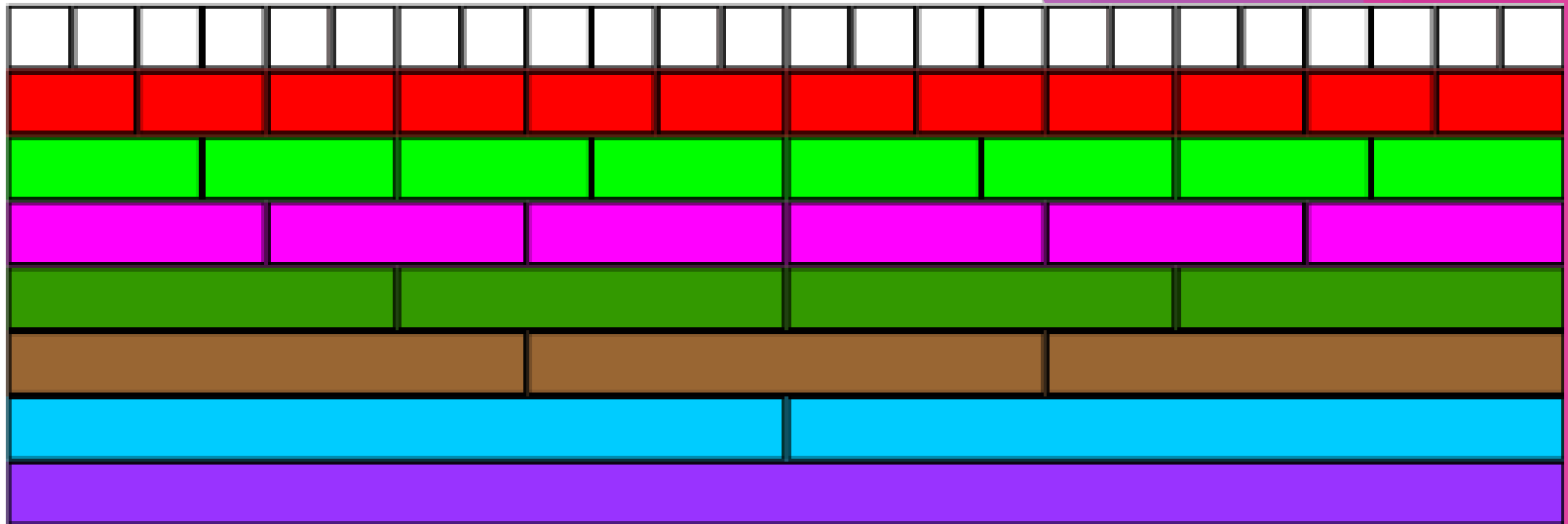
- ▶ Today we will be making connections between Fractions, Decimals and Percentages.
- ▶ Don't forget to join my lesson at 11am.

# Fractional Wall

(NRich)

Age 7 to 11

An Nrich challenge



Using the image above, how many different ways can you find of writing  $\frac{1}{2}$ ?

From the picture, what equivalent fractions for  $\frac{1}{3}$  can you find?

Again, using the image of the fraction wall, how else could you write  $\frac{3}{4}$ ?

What other fractions do you know that are the same as  $\frac{1}{2}$ ?

Find some other fractions which are equivalent to  $\frac{3}{4}$ .

Can you find any "rules" for working out equivalent fractions? Write your answer in full sentences.

# Making Connections

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There are 100 Smarties in a bag.  
45 are eaten. How many are left?



Write this as a fraction, decimal  
and percentage.

Match the percentages and decimals, and then add your own fraction.

30%

0.03

100%

0.2

17%

0.063

20%

1

3%

0.63

91%

0.91

63%

0.17

6.3%

0.3

Copy the equivalent FDP's like this

Percentages

Decimals

Fractions

30%

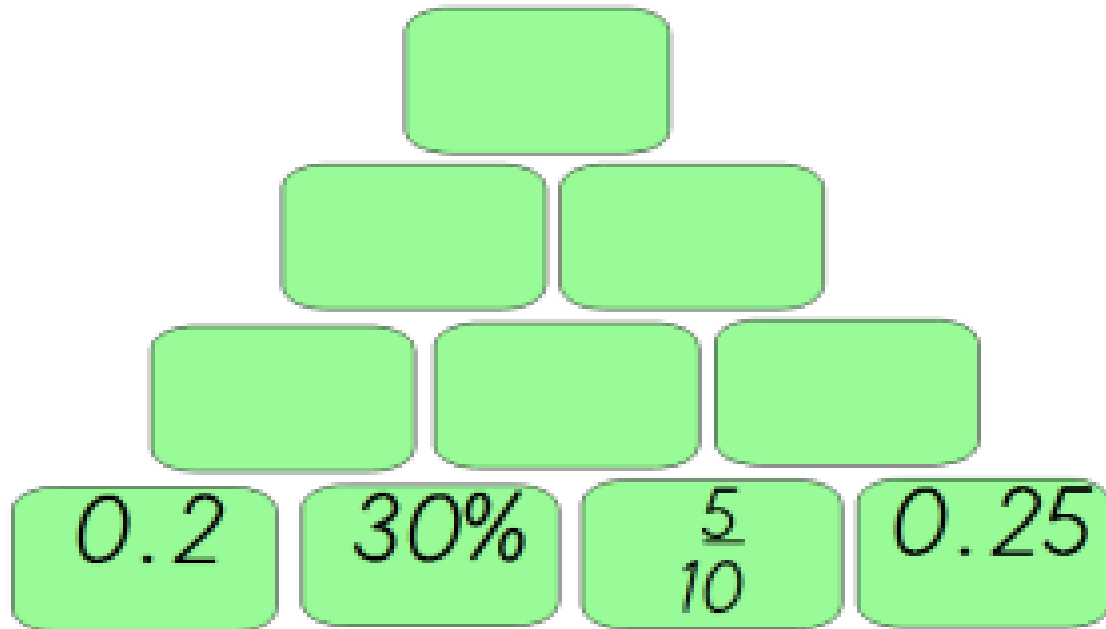
0.3 or £0.30 as money

$\frac{30}{100}$  or  $\frac{3}{10}$



# Copy and complete the pyramid

To complete this addition pyramid you must add the two adjacent numbers and write the answer in the block above. How can you go about completing this pyramid?



Adjacent  
numbers=  
numbers next  
to each other

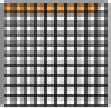

Converting all the amounts into decimals will make it easier. Add these jottings to each brick if they're not a decimal already.



# Making Connections

Fractions, decimals and percentages all link together.

Copy the table below and find the equivalent bar model, fraction, decimal or percentage.

<i>Pictorial</i>	<i>Fraction</i>	<i>Decimal</i>	<i>Percentage</i>
			
	$\frac{1}{5}$		
			
		0.3	
			33.3%

# Fractions, Decimals and Percentages

This Fraction wall also shows equivalent Decimals and Percentages.

1.00										1 whole										100%															
0.5					$\frac{1}{2}$					50%					0.5					$\frac{1}{2}$					50%										
0.33			$\frac{1}{3}$			33.3%			0.33			$\frac{1}{3}$			33.3%			0.33			$\frac{1}{3}$			33.3%											
0.25			$\frac{1}{4}$			25%			0.25			$\frac{1}{4}$			25%			0.25			$\frac{1}{4}$			25%			0.25			$\frac{1}{4}$			25%		
0.20		$\frac{1}{5}$		20%		0.20		$\frac{1}{5}$		20%		0.20		$\frac{1}{5}$		20%		0.20		$\frac{1}{5}$		20%		0.20		$\frac{1}{5}$		20%							
0.16		$\frac{1}{6}$		16.6%		0.16		$\frac{1}{6}$		16.6%		0.16		$\frac{1}{6}$		16.6%		0.16		$\frac{1}{6}$		16.6%		0.16		$\frac{1}{6}$		16.6%							
$\frac{1}{8}$		0.125		12.5%		$\frac{1}{8}$		0.125		12.5%		$\frac{1}{8}$		0.125		12.5%		$\frac{1}{8}$		0.125		12.5%		$\frac{1}{8}$		0.125		12.5%							
$\frac{1}{10}$		0.1		10%		$\frac{1}{10}$		0.1		10%		$\frac{1}{10}$		0.1		10%		$\frac{1}{10}$		0.1		10%		$\frac{1}{10}$		0.1		10%							

How can you represent  $\frac{1}{2}$  in different ways?  
Can you think of equivalent fractions?  
Think back to yesterday's investigation.

How can you represent  $\frac{2}{5}$  in different ways?

We're now going to work through some questions.

- ▶ You need to use your reasoning skills (your deeper thinking skills)
- ▶ Try to look for clues, what could step 1 be? Which key fact will get you started?
- ▶ What could the next step be?
- ▶ Are you ready? Let's get started!

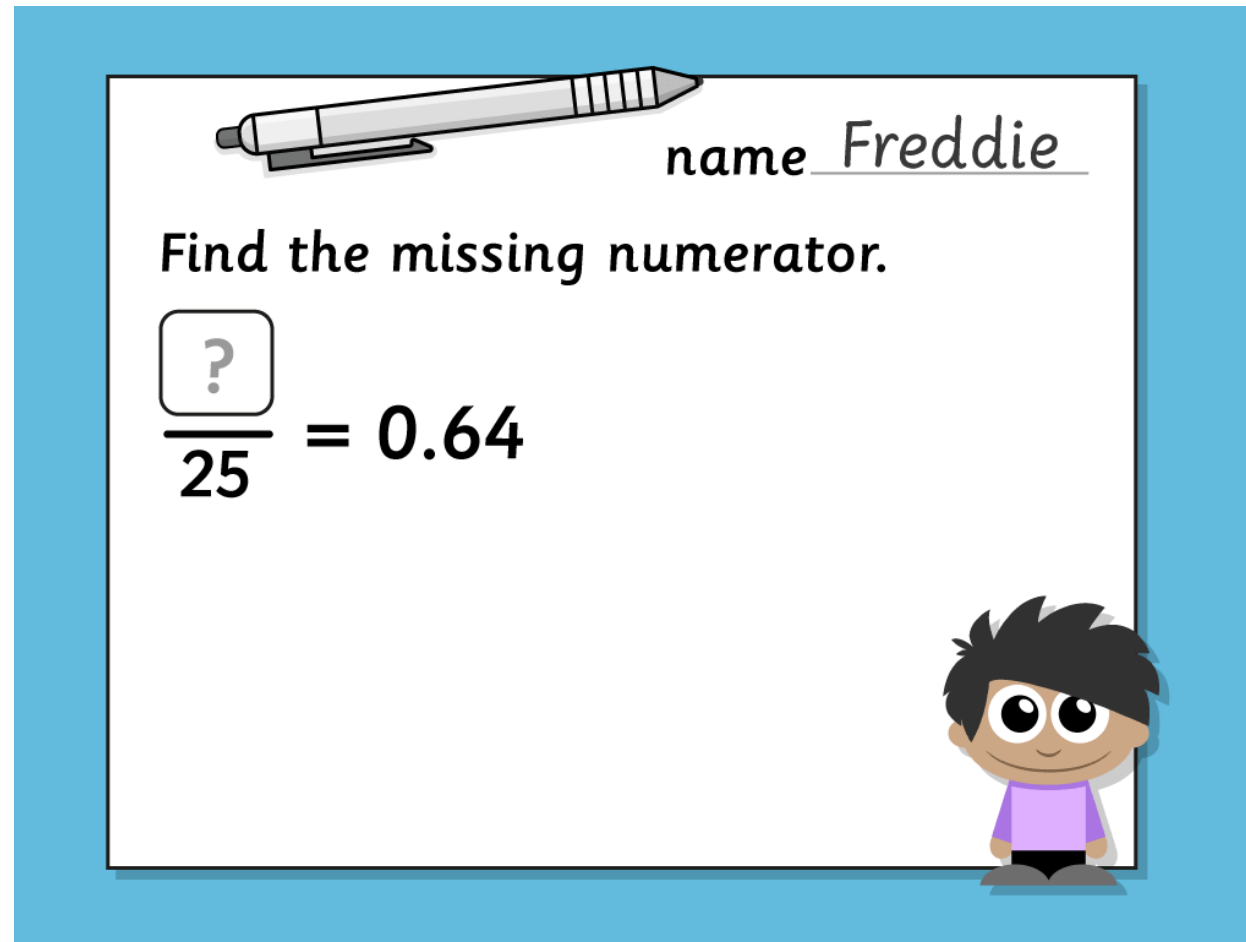


Which **two** children spend the same proportion of their pocket money on magazines?

### Proportion of pocket money spent on magazines

name	proportion
Isla	$\frac{2}{5}$
Kira	0.2
Jess	50%
Amin	40%

Freddie is trying to solve a maths problem. Explain how Freddie can find the missing numerator, and give the missing numerator.



name Freddie

Find the missing numerator.

$$\frac{\boxed{?}}{25} = 0.64$$

Which value is the odd one out? Explain your answer.

0.375

25%

12.5%

0.2

$\frac{5}{8}$

220 visitors to a theme park are asked to choose their favourite ride. **How many visitors** choose 'The Really Fast One' as their favourite?

### Survey of favourite theme park rides

ride	proportion
Silent Adventure	0.1
Big Drop	25%
The Really Fast One	
Attack of the Rat	$\frac{1}{2}$

The values on each card are equivalent, and each letter represents a missing digit or number. What is the product of **a**, **b** and **c**?

