


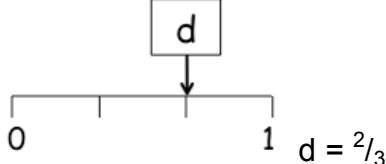
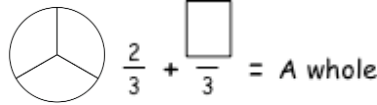
Save Teachers Sundays

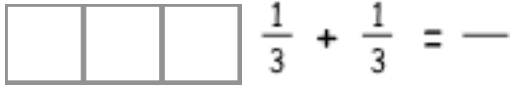
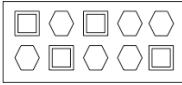

- medium-term / termly planning
 - weekly planning
- daily lesson plans (for trainees)
- resources for each lesson introduction
 - differentiated worksheets
- resources / ideas for each lesson plenary

Medium-term / Termly Planning

like this ...

Year 3 Fractions planning (Termly) - Spring 1 (Lessons 26 to 35)

Week	Day	Mental starter	Learning objective	Differentiation	Activity
6	Mon	To be able to pose addition word problems	To be able to shade a given fraction of a shape	LA – up to quarters MA – up to fifths HA – up to tenths G+T – shade mixed numbers and improper fractions	Chn to shade a given fraction of a shape e.g. $\frac{1}{4}$ or one quarter of 
	Tue	To be able to pose subtraction word problems	To be able to compare the value of fractions	LA – halves and quarters MA – halves, thirds and quarters HA – up to tenths G+T – convert fractions, percentages and decimals	Chn to use a fractions wall to compare fractions using symbols of $<$ $>$ and $=$ and words 'greater than', 'less than' and 'equivalent to' G+T – $\frac{1}{4} = 25\% = 0.25$
	Wed	To be able to pose multiplication word problems	To be able to order fractions by their value	LA – same denominators MA – different denominators, top number always 1 HA – different denominators and different numerators G+T – as HA, but without using fractions wall	Chn to use a fractions wall to order fractions from lowest to highest value e.g. $\frac{3}{5}$, $\frac{4}{5}$, $\frac{1}{5}$
	Thu	To be able to pose division word problems	To be able to identify fractions on a number line	LA – up to eighths MA – up to twelfths HA – convert fraction to percentage and decimal	 $d = \frac{2}{3}$
	Fri	To be able to pose find the difference problems	To recognise fraction pairs that make a whole	LA – find complementary pair to make a whole with fractions up to eighths MA – as LA, but up to tenths HA – as LA, but with mixed numbers	Chn to use diagrams to work out fraction pairs that make a whole  $\frac{2}{3} + \frac{\square}{3} = \text{A whole}$

Week	Day	Mental starter	Learning objective	Differentiation	Activity
7	Mon	To be able to add by partitioning	To be able to add and subtract fractions	LA – + & - halves, thirds and quarters MA – + & - fractions up to eighths HA – + & - fractions that total more than a whole G+T – + & - as HA, but not using diagrams	Chn to use diagrams to help them add and subtract fractions e.g. 
	Tue	To be able to subtract by partitioning	To be able to find a fraction of a number	LA – find halves, thirds and quarters MA – as LA, but also fifths HA – also fifths to tenths with top number G+T – calculate percentages of numbers	Chn to find a given fraction of a number e.g. ¼ of 8, ¾ of 12, all groups with numerator <1 G+T – e.g. 20% of 40
	Wed	To be able to add and subtract by partitioning	To be able to describe objects as a fraction of a set	LA – describe halves, thirds or quarters of sets MA – as LA, but also up to tenths HA – describe ratio of one shape to another Ext – give ration in simplest form e.g. 12:3 as 4:1	Chn to describe a fraction of a set What fraction of this set of shapes is  ? is  ?
	Thu	To be able to double	To be able to solve fraction word problems	LA – halves and quarters MA – as LA, but also thirds HA – as MA, but fifths, sixths, eighths and tenths G+T – mixed numbers and improper fractions	Chn to solve fraction word problems. Use measures to make new questions e.g. Sam runs 1Km of a 4Km race. What fractions has he ran?
	Fri	To be able to halve	To be able to compare fractions of measures	LA – numerator always one MA – numerator not always one HA – percentages	Chn to compare fractions of measures e.g. is ¼ of 8m or ½ of 10m longer?

Weekly Planning

like this ...

Year 3 Fractions Planning (Weekly)

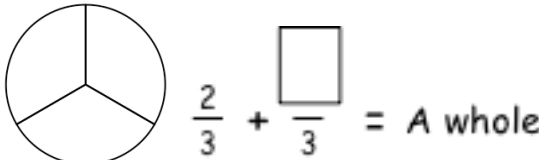
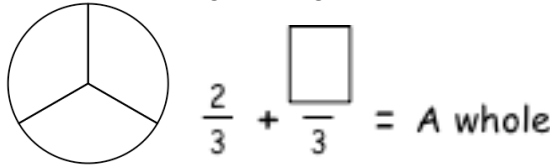
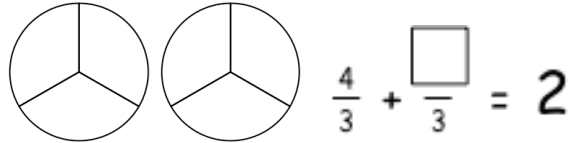
Term: Spring 1 Week 6

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
M	<p>Mental: Pose addition word problems</p> <p>Main: Shade fractions of shapes</p> <p>Spr026</p>	<p>Mental: Give children a few addition calculations and ask them to pose some addition word problems to go with them. Give children suggestions for things to use e.g. fruit, sweets etc</p> <p>Main: G+T children to attempt higher ability work without listening to teacher. TA to monitor their progress. If confident, allow them to finish; if struggling send to carpet to listen to teacher</p> <p>Revise how fractions can be written in words (half, quarter or eighth) and in numbers ($\frac{1}{2}$, $\frac{1}{4}$, or $\frac{1}{8}$) Show children cards with the fraction name next to its representation in numbers e.g. $\frac{1}{2}$ and half, having them repeat them aloud Revise how we can use shapes to show fractions Look at several pairs of shapes. In each pair one shape is split in to equal-sized parts; the other shape is split in to unequal-sized parts. Which one shows a fraction? Revise how the bottom number in a fraction tells you how many equal-sized pieces a whole has been split in to Explain how the top number in a fraction tells you how many of the sections it represent e.g. $\frac{3}{4}$ represents 3 out of 4 Go through examples of shading fractions on shapes, emphasising that a fraction means 'x parts out of y parts' e.g. a quarter means one out of four parts</p> <p>Have G+T children come to the carpet Revise terms 'improper fraction' and 'mixed number'. When we looked at them previously we thought of them as chocolate bars e.g. $1\frac{1}{2}$ as 1 and $\frac{1}{2}$ chocolate bars Explain that today we will be thinking of mixed numbers and improper fractions as pizzas Model for them how to shade mixed numbers and improper fractions</p>	<p>Lower ability – shade shapes to show halves, quarters or a whole</p> <p>Middle ability – as for lower ability, but also thirds and fifths</p> <p>Higher ability – as for middle ability, but also sixths, eighths and tenths</p> <p>G+T – shade mixed numbers and improper fractions</p> <p>Extension – try to draw own shapes and shade fractions of their own choice</p>	<p>Give children a card with either a shape representing a fraction or a fraction in numbers Each child needs to find their corresponding partner Have each pair show their fraction shape and fraction in numbers and explain why they needed to find the children they found e.g. 'I needed to find a shape split in to 4 pieces with 3 shaded because I had the fraction $\frac{3}{4}$' Give lower ability children fractions with a top number of 1 and / or halves and quarters (Make sure cards you use match as there will probably be too many for a class of 30)</p>

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
Tu	<p>Mental: Pose subtraction word problems</p> <p>Main: Compare fractions</p> <p>Spr027</p>	<p>Mental: Give children a few subtraction calculations and ask them to pose some subtraction word problems to go with them. Give children suggestions for things to use e.g. fruit, sweets etc</p> <p>Main: G+T children to attempt higher ability work without listening to teacher. TA to monitor their progress. If confident, allow them to finish; if struggling send to carpet to listen to teacher</p> <p>Revise how yesterday we looked at fractions of shapes. What did the bottom number tell us? How about the top number? Revise how a fraction tells you the equal-sized parts of a whole Show children a fractions wall. Explain that we can use this to compare fractions Model how to use the fractions wall to compare fractions using the words 'equivalent to', 'greater than' and 'less than' Ask children to think, pair, share some sentences of their own using these words e.g. $\frac{1}{2}$ is less than $\frac{3}{4}$</p> <p>Have G+T children come to carpet Show them a fractions wall that also has percentages and decimals on it. Take this fractions wall away again Tell them to remember that a whole is equivalent to 1 and 100% Explain how to convert fractions, percentages and decimals:</p> <ul style="list-style-type: none"> • If you start with a fraction, change it to a fraction over 100. The top number will be the percentage. Then put a decimal point in front of the number in the tens column e.g. $\frac{3}{4} = \frac{75}{100} = 75\% = 0.75$ • If you start with a percentage change it to a fraction over 100. Then put a decimal point in front of the number in the tens column e.g. $10\% = \frac{10}{100} = 0.1$ • If you start with a decimal, change it to a percentage e.g. $0.32 = 32\%$ <p>Model several examples, including with mixed numbers e.g. $4\frac{1}{2} = 450\% = 4.5$</p>	<p>Lower ability – use the symbols < > and = and the words 'greater than'. 'less than' and 'equivalent to' to compare a whole, halves and quarters</p> <p>Middle ability – as for lower ability, but also thirds</p> <p>Higher ability – as lower ability, but also fractions up to tenths</p> <p>G+T – convert fractions, percentages and decimals e.g. $\frac{1}{4} = 50\% = 0.5$</p> <p>Extension – make up their own sentences comparing fractions</p>	<p>Leave large fraction wall on the IWB Ask children to write some of their own sentences comparing fractions using the vocabulary of 'equivalent to', 'greater than' and 'less than' Children to share their sentences with a partner. Do partners agree that sentences are correct? Discuss</p>

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
W	<p>Mental: Pose multiplication word problems</p> <p>Main: Order fractions</p> <p>Spr028</p>	<p>Mental: Give children a few multiplication calculations and ask them to pose some multiplication word problems to go with them. Give children suggestions for things to use e.g. fruit, sweets etc</p> <p>Main: TA to take G+T children to work with them on ordering fractions without using a fractions wall by finding a common denominator and converting the fractions so that they all have the same denominator and can then be compared Visual representations</p> <p>Revise how yesterday we looked at comparing fractions. What symbols and language did we use? (< > and = and greater than, less than and equivalent to) Revise how a fraction tells you the equal-sized parts of a whole Show children a fractions wall. Revise how we can use this to compare fractions Shade one half, one third, one quarter and one eighth of a circle to show how as the bottom number of a fraction gets bigger, the fraction gets smaller Model how to use the fractions wall to order a series of fractions from smallest to greatest by shading the relevant sections of the wall and comparing them All children except G+T to start work Model for G+T how to order fractions without using a fractions wall Show them a fractions wall that also has percentages and decimals on it. Take this fractions wall away again Tell them to remember that a whole is equivalent to 1 and 100% Explain how to convert fractions, percentages and decimals:</p> <ul style="list-style-type: none"> • If you start with a fraction, change it to a fraction over 100. The top number will be the percentage. Then put a decimal point in front of the number in the tens column e.g. $\frac{3}{4} = \frac{75}{100} = 75\% = 0.75$ • If you start with a percentage change it to a fraction over 100. Then put a decimal point in front of the number in the tens column e.g. $10\% = \frac{10}{100} = 0.1$ • If you start with a decimal, change it to a percentage e.g. $0.32 = 32\%$ <p>Model several examples, including with mixed numbers e.g. $4\frac{1}{2} = 450\% = 4.5$</p>	<p>Lower ability – order fractions with the same denominator (give visual representations from http://www.sparklebox.co.uk/3391-3400/sb3391.html#.UMspqYUZ3fl) if cannot work with fraction wall) e.g. $\frac{3}{5}$, $\frac{1}{5}$ and $\frac{2}{5}$</p> <p>Middle ability – order fractions with different denominators, but with a numerator of 1 by using a fractions wall e.g. $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{1}{3}$</p> <p>Higher ability – as middle ability, but with numerators other than 1 e.g. $\frac{3}{4}$, $\frac{2}{3}$ and $\frac{3}{5}$</p> <p>G+T – order fractions without using a fractions wall e.g. $\frac{10}{20}$, $\frac{3}{5}$ and $\frac{7}{10}$</p> <p>Extension – make up their own series of 3 fractions to order</p>	<p>Split the class in to 4 teams Give each child in the class a fraction Have a race in which teams need to get in to order from smallest to greatest fraction</p>

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
Th	<p>Mental: Pose division word problems</p> <p>Main: Identify fractions on number lines</p> <p>Spr029</p>	<p>Mental: Give children a few division calculations and ask them to pose some division word problems to go with them. Give children suggestions for things to use e.g. fruit, sweets etc</p> <p>Main: Revise how yesterday we have looked at comparing fractions on a fractions wall. What did the bottom number tell us? How about the top number? Revise how a fraction tells you the equal-sized parts of a whole Explain that the number 1 is a whole, and so we can split it in to smaller fractions Model how to find fractions on a number line, writing them in numbers and words e.g.</p> <div data-bbox="477 676 846 890" data-label="Diagram"> </div> <p>d) two thirds and $\frac{2}{3}$</p> <p>Explain for G+T children how to convert a fraction to a percentage and to a decimal:</p> <ul style="list-style-type: none"> • See what you need to multiply the bottom number by to make it 100 • Multiply the top and the bottom number by this number so you have a fraction out of 100 • The top number in this fraction over 100 is the percentage • Put a 0. in front of the percentage <p>Tell children that they count up in the decimal, as they would when reading a scale, to check if their answer is correct</p>	<p>Lower ability – find fractions of a whole on a number line (up to eighths)</p> <p>Middle ability – find fractions of a whole on a number line (up to twelfths)</p> <p>Higher ability – find fractions of a whole on a number line, and convert these fractions to percentages and decimals</p> <p>Extension – draw their own examples of fractions on number lines</p>	<p>Have a series of large number lines (a rope with cones) split in to halves, thirds, quarters, fifths, sixths and eighths for children to stand by. (Set this up so that children can also see equivalence between different fractions)</p> <p>Give each child a fraction and they need to go and stand in the correct place by a cone Change the cones so that they are at unequal distance apart. Are they still fractions? (no because they are not equally spaced anymore)</p>

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
F	<p>Mental: Pose 'find the difference' word problems</p> <p>Main: Find fraction pairs that make a whole</p> <p>Spr030</p>	<p>Mental: Give children a few subtraction calculations and ask them to pose some 'find the difference' word problems to go with them. Give children suggestions for measures to use e.g. lengths, weights, capacities, temperatures etc</p> <p>Main: Explain that just like there are number pairs that add up to 10, there are also fractions that add up to a whole</p> <p>Model for the children how to use a diagram to find what complementary fraction is needed to make a whole:</p> <ul style="list-style-type: none"> shade the fraction given in one colour e.g. shade two thirds in green shade the remaining sections in a different colour e.g. shade the remaining third the second colour should show you what fraction you need to add e.g. because you only needed to shade one more third, you need to add 1 third to make a whole  <p>All children except higher ability to start work Repeat above model for G+T with mixed numbers and improper fractions</p>	<p>Lower ability – use a diagram to work out the complementary fraction to make a whole, with fractions up to eighths e.g.</p>  <p>Middle ability – as lower ability, but with fractions up to tenths and later questions without diagrams</p> <p>Higher ability – as lower ability, but with mixed numbers e.g.</p>  <p>Extension – make up some examples of their own, without using diagrams</p>	<p>Give each child a fraction from http://www.sparklebox.co.uk/6741-6750/sb6748.html#.UMtZT4UZ3fI</p> <p>Each child needs to find their complementary partner to make a whole e.g. the child with 3/4 needs to find the child with 1/4</p> <p>Have children stand with their fractions on display and read them aloud e.g. '1/4 plus 3/4 equals a whole' (Give lower ability children halves, thirds and quarters)</p>

Daily lesson plans (for trainees)

like this ...

Comparing fractions using a fractions wall lesson plan

Subject: Maths	Lesson Title: Comparing fractions using a fractions wall	
Date:	Time Span:	
Year Group: Year 3	Group Size: 30	

Desired Learning Outcomes	NC PoS ref:
To be able to compare the size of fractions G+T – to be able to convert fractions, percentages and decimals	

Key Language: Fraction, half, third, quarter, fifth, sixth, eighth, tenth, whole, equal-sized, equivalent to, greater than and less than	Use of ICT: SmartBoard for introduction
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Assessment (Make reference to each section of the lesson) Intro – G+T children to attempt higher ability work without listening to teacher Main – Mark children's work as they complete it. Sit with any children who are struggling, bringing them back to the carpet if necessary. If still unsure by end of lesson sit with TA during plenary. Plenary – Can children make their own sentences comparing two fractions?

Use of Other Adults TA to monitor progress of G+T children at start of lesson TA to monitor progress of children once they begin working TA to sit and continue working with children (of any ability) who struggled in plenary

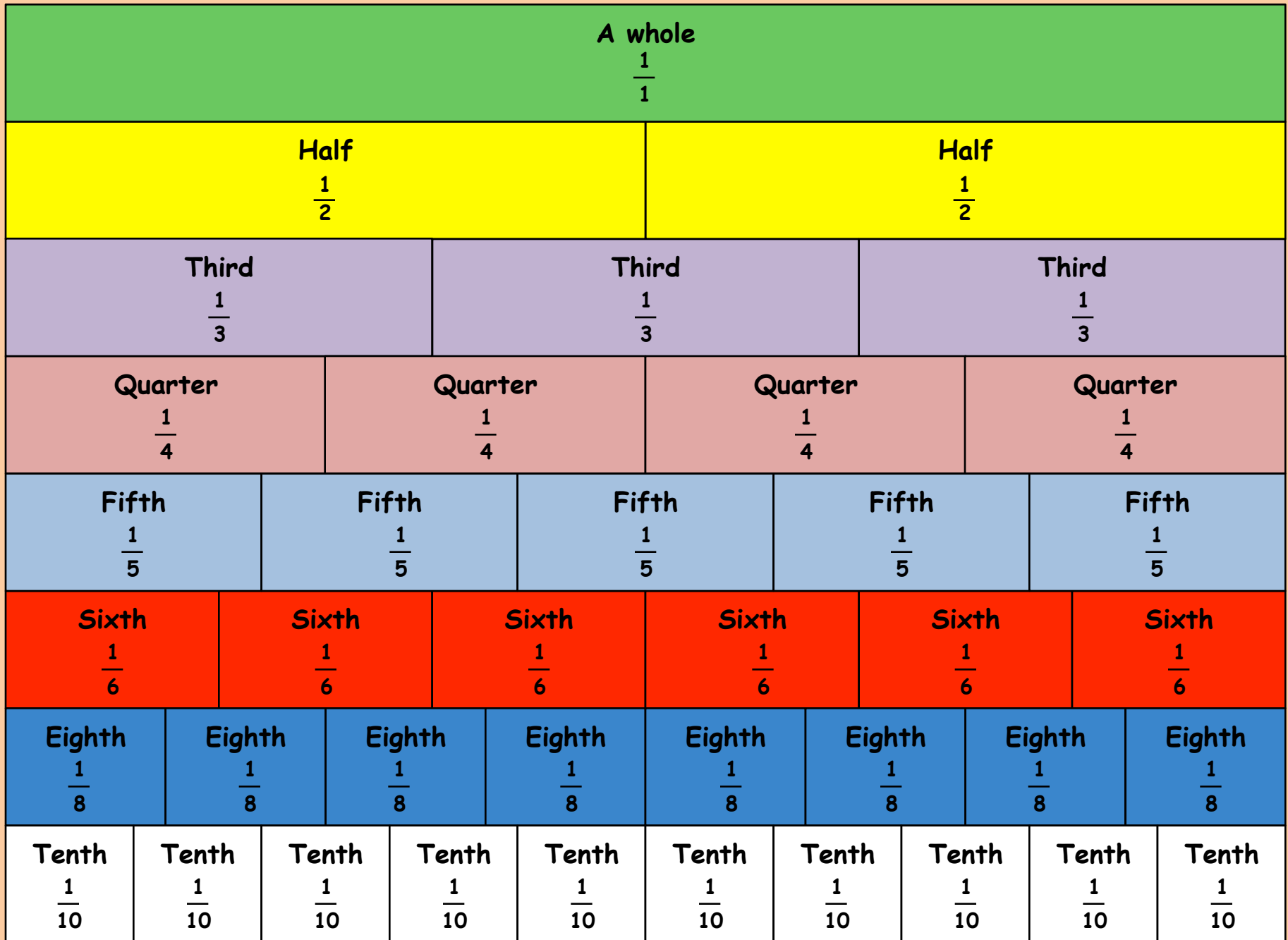
Anticipated Misconceptions/Difficulties Children not making the link between what they are doing and the concept of fractions Children thinking that $\frac{1}{4}$ is more than $\frac{1}{2}$ because the bottom number of 4 in a quarter is higher than the bottom number of 2 in a half

Resources Copies of fractions walls Pupil whiteboards and pens

Introduction	Time
<p>G+T children to attempt higher ability work without listening to teacher. TA to monitor their progress. If confident, allow them to finish; if struggling send to carpet to listen to teacher</p> <p>Revise how yesterday we looked at fractions of shapes. What did the bottom number tell us? How about the top number?</p> <p>Revise how a fraction tells you the equal-sized parts of a whole</p> <p>Show children a fractions wall. Explain that we can use this to compare fractions</p> <p>Model how to use the fractions wall to compare fractions using the words 'equivalent to', 'greater than' and 'less than'</p> <p>Ask children to think, pair, share some sentences of their own using these words e.g. $\frac{1}{2}$ is less than $\frac{3}{4}$</p> <p>Have G+T children come to carpet</p> <p>Show them a fractions wall that also has percentages and decimals on it. Take this fractions wall away again</p> <p>Tell them to remember that a whole is equivalent to 1 and 100%</p> <p>Explain how to convert fractions, percentages and decimals:</p> <ul style="list-style-type: none"> • If you start with a fraction, change it to a fraction over 100. The top number will be the percentage. Then put a decimal point in front of the number in the tens column e.g. $\frac{3}{4} = \frac{75}{100} = 75\% = 0.75$ • If you start with a percentage change it to a fraction over 100. Then put a decimal point in front of the number in the tens column e.g. $10\% = \frac{10}{100} = 0.1$ • If you start with a decimal, change it to a percentage e.g. $0.32 = 32\%$ <p>Model several examples, including with mixed numbers e.g. $4\frac{1}{2} = 450\% = 4.5$</p>	15 mins
<p>Main (including differentiated tasks)</p> <p>Lower ability – use the symbols < > and = and the words 'greater than'. 'less than' and 'equivalent to' to compare a whole, halves and quarters</p> <p>Middle ability – as for lower ability, but also thirds</p> <p>Higher ability – as lower ability, but also fractions up to tenths</p> <p>G+T – convert fractions, percentages and decimals e.g. $\frac{1}{4} = 25\% = 0.25$</p> <p>Extension – make up their own sentences comparing fractions</p>	20 mins
<p>Plenary</p> <p>Leave large fraction wall on the IWB</p> <p>Ask children to write some of their own sentences comparing fractions using the vocabulary of 'equivalent to', 'greater than' and 'less than'</p> <p>Children to share their sentences with a partner. Do partners agree that sentences are correct? Discuss</p>	10 mins

Resources for each lesson
introduction

like this ...



A whole $\frac{1}{1}$									
Half $\frac{1}{2}$					Half $\frac{1}{2}$				
Third $\frac{1}{3}$			Third $\frac{1}{3}$			Third $\frac{1}{3}$			
Quarter $\frac{1}{4}$		Quarter $\frac{1}{4}$		Quarter $\frac{1}{4}$		Quarter $\frac{1}{4}$			
Fifth $\frac{1}{5}$	Fifth $\frac{1}{5}$		Fifth $\frac{1}{5}$	Fifth $\frac{1}{5}$		Fifth $\frac{1}{5}$	Fifth $\frac{1}{5}$		
Sixth $\frac{1}{6}$	Sixth $\frac{1}{6}$		Sixth $\frac{1}{6}$	Sixth $\frac{1}{6}$		Sixth $\frac{1}{6}$	Sixth $\frac{1}{6}$		
Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	Eighth $\frac{1}{8}$	
Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$	Tenth $\frac{1}{10}$

Differentiated worksheets

like this ...

Name: _____

Independent / Some adult support / A lot of adult support

Date: _____

Compare fractions

equivalent to / =

greater than / >

less than / <

1) A whole is _____ 2 halves. $\frac{1}{1}$ $\frac{2}{2}$

2) A whole is _____ 4 quarters. $\frac{1}{1}$ $\frac{4}{4}$

3) 1 half is _____ a whole. $\frac{1}{2}$ $\frac{1}{1}$

4) 1 half is _____ 2 quarters. $\frac{1}{2}$ $\frac{2}{4}$

5) 1 half is _____ 1 quarter. $\frac{1}{2}$ $\frac{1}{4}$

6) A whole is _____ 3 quarters. $\frac{1}{1}$ $\frac{3}{4}$

7) 1 quarter is _____ a whole. $\frac{1}{4}$ $\frac{1}{1}$

8) 2 halves is _____ 3 quarters. $\frac{2}{2}$ $\frac{3}{4}$

9) 1 half is _____ 3 quarters. $\frac{1}{2}$ $\frac{3}{4}$

10) A whole _____ 1 half. $\frac{1}{1}$ $\frac{1}{2}$

Answers

equivalent to / =

greater than / >

less than / <

1) A whole is equivalent to 2 halves.

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

2) A whole is equivalent to 4 quarters.

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

3) 1 half is less than a whole.

$$\frac{1}{2} \boxed{<} \frac{1}{1}$$

4) 1 half is equivalent to 2 quarters.

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

5) 1 half is greater than 1 quarter.

$$\frac{1}{2} \boxed{>} \frac{1}{4}$$

6) A whole is greater than 3 quarters.

$$\frac{1}{1} \boxed{>} \frac{3}{4}$$

7) 1 quarter is less than a whole.

$$\frac{1}{4} \boxed{<} \frac{1}{1}$$

8) 2 halves is greater than 3 quarters.

$$\frac{2}{2} \boxed{>} \frac{3}{4}$$

9) 1 half is less than 3 quarters.

$$\frac{1}{2} \boxed{<} \frac{3}{4}$$

10) A whole greater than 1 half.

$$\frac{1}{1} \boxed{>} \frac{1}{2}$$

Name: _____

Independent / Some adult support / A lot of adult support

Date: _____

Compare fractions

equivalent to / =

greater than / >

less than / <

1) A whole is _____ 2 halves.

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

2) 2 halves is _____ 3 thirds.

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

3) A whole is _____ 4 quarters.

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

4) 1 half is _____ 1 third.

$$\frac{1}{2} \square \frac{1}{3}$$

5) 1 quarter is _____ 1 half.

$$\frac{1}{4} \square \frac{1}{2}$$

6) A whole is _____ 3 thirds.

$$\frac{1}{1} \square \frac{3}{3}$$

7) 1 half is _____ 2 quarters.

$$\frac{1}{2} \square \frac{2}{4}$$

8) A half is _____ 3 quarters.

$$\frac{1}{2} \square \frac{3}{4}$$

9) A whole is _____ 1 half.

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

10) 1 half is _____ 2 thirds.

$$\frac{1}{2} \square \frac{2}{3}$$

Answers

equivalent to / =

greater than / >

less than / <

1) A whole is equivalent to 2 halves.

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

2) 2 halves is greater than 3 thirds.

$$\frac{2}{2} \boxed{>} \frac{2}{3}$$

3) A whole is equivalent to 4 quarters.

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

4) 1 half is greater than 1 third.

$$\frac{1}{2} \boxed{>} \frac{1}{3}$$

5) 1 quarter is less than 1 half.

$$\frac{1}{4} \boxed{<} \frac{1}{2}$$

6) A whole is equivalent to 3 thirds.

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

7) 1 half is equivalent to 2 quarters.

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

8) A half is less than 3 quarters.

$$\frac{1}{2} \boxed{<} \frac{3}{4}$$

9) A whole is greater than 1 half.

$$\frac{1}{1} \boxed{>} \frac{1}{2}$$

10) 1 half is less than 2 thirds.

$$\frac{1}{2} \boxed{<} \frac{2}{3}$$

Name: _____

Date: _____

Compare fractions

equivalent to / =

greater than / >

less than / <

1) A whole is _____ 3 thirds.

$$\frac{1}{1} \square \frac{3}{3}$$

2) 2 halves is _____ 3 thirds.

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

3) A whole is _____ 4 fifths.

$$\frac{1}{1} \square \frac{4}{5}$$

4) 1 third is _____ 1 sixth.

$$\frac{1}{3} \square \frac{1}{6}$$

5) 1 tenth is _____ 1 fifth.

$$\frac{1}{10} \square \frac{1}{5}$$

6) A whole is _____ 8 eighths.

$$\frac{1}{1} \square \frac{8}{8}$$

7) 1 quarter is _____ 2 eighths.

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

8) A half is _____ 4 fifths.

$$\frac{1}{2} \square \frac{4}{5}$$

9) 2 sixths is _____ 1 third.

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

10) 2 tenths is _____ 1 fifth.

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

Answers

equivalent to / =

greater than / >

less than / <

1) A whole is equivalent to 3 thirds.

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

2) 2 halves is less than 3 thirds.

$$\frac{2}{2} \boxed{<} \frac{3}{3}$$

3) A whole is greater than 4 fifths.

$$\frac{1}{1} \boxed{>} \frac{4}{5}$$

4) 1 third is less than 1 sixth.

$$\frac{1}{3} \boxed{>} \frac{1}{6}$$

5) 1 tenth is less than 1 fifth.

$$\frac{1}{10} \boxed{<} \frac{1}{5}$$

6) A whole is equivalent to 8 eighths.

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

7) 1 quarter is equivalent to 2 eighths.

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

8) A half is less than 4 fifths.

$$\frac{1}{2} \boxed{<} \frac{4}{5}$$

9) 2 sixths is equivalent to 1 third.

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

10) 2 tenths is equivalent to 1 fifth.

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

Convert fractions, percentages and decimals

For each question you need to work out the equivalent fraction (or mixed number), decimal or percentage

$$\frac{1}{100} = 0.01 = 1\%$$

$$\frac{10}{100} = 0.1 = 10\%$$

$$\frac{100}{100} = 1 = 100\%$$

1) $\frac{20}{100}$

2) 0.4

3) 70%

4) $\frac{9}{100}$

5) 0.02

6) 4%

7) $\frac{5}{10}$

8) $\frac{2}{5}$

9) $4\frac{4}{100}$

10) 8.1

11) 329%

12) 2.01

13) $9\frac{78}{100}$

14) 508%

Answers

For each question you need to work out the equivalent fraction (or mixed number), decimal or percentage

Answers

1) $\frac{20}{100}$ 20% 0.2

2) 0.4 40% $\frac{40}{100}$

3) 70% 0.7 $\frac{70}{100}$

4) $\frac{9}{100}$ 9% 0.09

5) 0.02 2% $\frac{2}{100}$

6) 4% 0.04 $\frac{4}{100}$

7) $\frac{5}{10}$ 50% 0.5

8) $\frac{2}{5}$ 40% 0.4

9) $4\frac{4}{100}$ 404% 4.4

10) 8.1 810% $8\frac{10}{100}$

11) 329% 3.29 $3\frac{29}{100}$

12) 2.01 201% $2\frac{1}{100}$

13) $9\frac{78}{100}$ 978% 9.78

14) 508% 5.08 $5\frac{8}{100}$