BRONZE

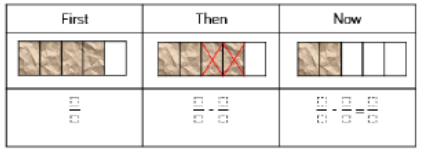
School name: **MATHS PLANNING YEAR A**

Teacher: **Class:** **Year:** **Term: Spring 2** **Week Commencing: Week 4**

Topic	NC Links: Pupils should be taught to:

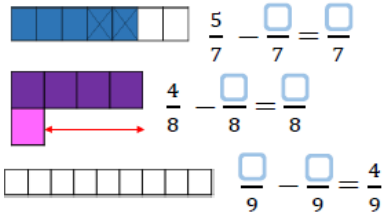
Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Mon	**L.O. Recall 9x table** 612 x 9 = 821 ÷ 9 = 3079 + 951 = 5000 - 3214 = 1.8m = ?cm	TMM **L.O. To fill in the missing gaps**	**L.O. To Subtract Fractions** **Must:** Subtract fractions using bar models. **Should:** Subtract fractions using part/whole models **Could:** Explain methods **Success Criteria**	Teach children to use practical equipment and pictorial representations to subtract fractions with the same denominator within one whole. They must understand that we only subtract the numerators and the denominators stay the same.	Chn use bar models and number stories to explain a pictorial representation. Use part/whole models to subtract fractions Explain methods **SEN – L.O.**	Fraction Denominator Numerator Difference Take away Subtract	What fraction is shown first? Then what happens? Now what is left? Can we represent this in a number story?	**Exceeding ARE:** **At ARE:** **Below ARE:** **SEND** **PPG** **EAL**

Eva is eating a chocolate bar. Fill in the missing information.

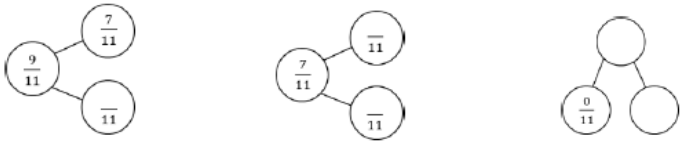


Can you write a number story using 'first', 'then' and 'now' to describe your calculation?

Use the models to help you subtract the fractions.



Complete the part whole models. Use equipment if needed. Can you write fact families for each model?



Find the missing fractions:

$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \frac{\square}{7}$

$\frac{\square}{9} - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$

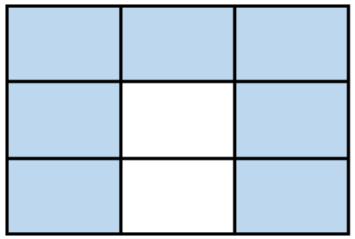
Jack and Annie are solving $\frac{4}{5} - \frac{2}{5}$

Jack's method:

Annie's method:

They both say the answer is two fifths. Can you explain how they have found their answers?

How many fraction addition and subtractions can you make from this model?



Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Tues	**L.O. Recall 9x table** **1515 - 795 =** **37 + 2578 =** **547 x 9 =** **575 ÷ 9 =** **35cm = ?mm**	TMM **L.O. To fill in a Venn Diagram.**	**L.O. To add 2 or more fractions.** **Must:** Add 2 or more fractions of the same denominator within a whole. **Should:** Add 2 or more fractions of the same denominator beyond a whole. **Could:** Explain word problems involving adding 2 or more fractions that end in mixed/improper fraction **Success Criteria**	Children use practical equipment and pictorial representations to add two or more fractions with the same denominator which total less than 1. Then record numbers greater than 1 using mixed numbers. Only add the numerator, the denominator stays the same.	Use strips of folded card to add quarters. Use bar models and number lines to add fractions Spot, explain and correct errors. Explain calculations that add to a mixed number/improper fraction. **SEN – L.O.**	Fraction Add Subtract Total whole Denominator Numerator Improper Mixed number	How many equal parts is the whole split into? How many equal parts am I adding Which bar model do you prefer when adding fractions? Why? Can you combine any pairs of fractions to make one whole when you are adding three fractions?	**Exceeding ARE:** **At ARE:** **Below ARE:** **SEND** **PPG** **EAL**

Take two identical strips of paper.
Fold your paper into quarters.
Can you use the strips to solve

$\frac{1}{4}+\frac{1}{4}$ $\frac{1}{4}+\frac{1}{4}+\frac{1}{4}$ $\frac{3}{4}+\frac{3}{4}$ $\square+\square=\frac{7}{4}$

What other fractions can you make and add?

Use the models to add the fractions:

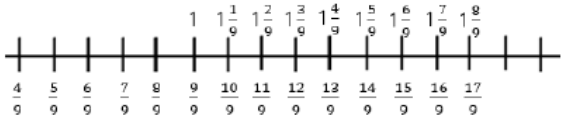
$\frac{2}{7}+\frac{2}{7}=$

$\frac{3}{5}+\frac{4}{5}=$

Choose your preferred model to add:

$\frac{2}{5}+\frac{1}{5}$ $\frac{3}{7}+\frac{6}{7}$ $\frac{7}{9}+\frac{4}{9}$

Use the number line to add the fractions.



$\frac{4}{9}+\frac{4}{9}+\frac{8}{9}=$

$\frac{4}{9}+\frac{5}{9}+\frac{8}{9}$ $\frac{1}{9}+\frac{11}{9}+1$ $\square+\frac{5}{9}+\frac{7}{9}=\frac{17}{9}$

Alex is adding fractions.

$\frac{3}{9}+\frac{2}{9}=\frac{5}{18}$

Is she correct? Explain why.

How many different ways can you find to solve the calculation?

$\frac{\square}{\square}+\frac{\square}{\square}=\frac{11}{9}$

Mo and Teddy are solving:

$\frac{6}{13}+\frac{5}{13}+\frac{7}{13}$

Mo

The answer is 1 and $\frac{5}{13}$

Teddy

The answer is $\frac{18}{13}$

Who do you agree with?
Explain why.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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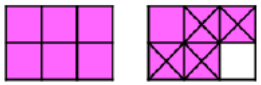
Wed	**L.O. To recall 9x table** **4000 - 745 =** **446 x 9 =** **771 ÷ 9 =** **1009 + 4174 =** **15cm = ?mm**	**TMM** **L.O. To fill in a web**	**L.O. To Subtract fractions** **Must:** use folded card to calculate fractions **Should:** use bar models and number lines to subtract fractions **Could:** Spot, explain and correct errors. **Success Criteria**	Children use practical equipment and pictorial representations to subtract fractions with the same denominator. Encourage children to explore subtraction as take away and as difference. Difference can be represented on a bar model by using a comparison model and making both fractions in the subtraction.	Use folded card to solve subtraction of eighths Use bar models and number lines to subtract fractions Match number story to correct statement. Spot, explain and correct errors **SEN – L.O.**	Fraction Denominator Numerator Difference Take away Subtract	How can I find a missing number in a subtraction? Can you count on to find the difference? Can I partition my fraction to help me subtract?	**Exceeding ARE:** **At ARE:** **Below ARE:** **SEND** **PPG** **EAL**

Use identical strips of paper and fold them into eighths.
Use the strips to solve the calculations.

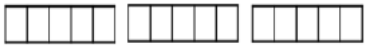
$\frac{8}{8} - \frac{3}{8} =$ $\frac{7}{8} - \frac{3}{8} =$ $\frac{16}{8} - \frac{9}{8} =$ $\frac{13}{8} - \square = \frac{7}{8}$

Use the bar models to subtract the fractions.

$\frac{6}{7} - \frac{2}{7} =$



$\frac{11}{6} - \square = \square$



$\frac{13}{5} - \square = \frac{6}{5}$

Annie uses the number line to solve $\frac{17}{11} - \frac{9}{11}$

Use a number line to solve:

$\frac{16}{13} - \frac{9}{13}$ $\frac{16}{9} - \frac{9}{9}$ $\frac{16}{7} - \frac{9}{7}$ $\frac{16}{16} - \frac{9}{16}$

Match the number stories to the correct calculations.

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ How much do they eat altogether?	$\frac{7}{8} + \frac{3}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{3}{8}$ less. How much does Dora eat?	$\frac{7}{8} - \frac{3}{8} = -$

How many different ways can you find to solve the calculation?

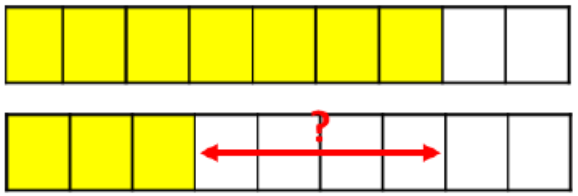
$\square - \frac{3}{7} = \square + \square$

$\square - \frac{3}{7} = \square - \square$

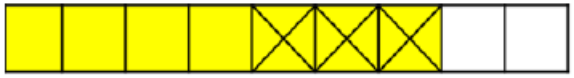
Annie and Amir are working out the answer to this problem.

$\frac{7}{9} - \frac{3}{9}$

Annie uses this model.



Amir uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

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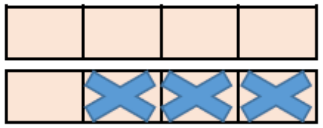
Thurs	**L.O. To recall 9x table** **652 + 6547 =** **500 - 332 =** **952 x 9 =** **654 ÷ 9 =** **50cm = ?m**	**TMM** **L.O. To solve a multiplication pyramid**	**L.O. To subtract fractions from a whole one.** **Must:** use folded card to calculate fractions **Should:** use bar models and number lines to subtract fractions **Could:** Solve problems **Success Criteria**	Children continue to use practical equipment and pictorial representations to subtract fractions. Children subtract fractions from a whole amount. Children need to understand how many equal parts are equivalent to a whole e.g. 99= 1, 189= 2 etc.	Use cubes, card, bar models and number lines to solve calculations. Spot, explain and correct errors. Solve problems. **SEN – L.O.**	Fraction Denominator Numerator Difference Take away Subtract	What do you notice about the numerator and denominator when a fraction is equal to one whole?	**Exceeding ARE:** **At ARE:** **Below ARE:** **SEND** **PPG** **EAL**

Use cubes, strips of paper or a bar model to solve:

$\frac{9}{9} - \frac{4}{9} = \square$ $\frac{9}{9} - \square = \frac{2}{9}$ $\frac{13}{9} - \frac{9}{9} = \square$

What's the same? What's different?

Jack uses a bar model to subtract fractions.

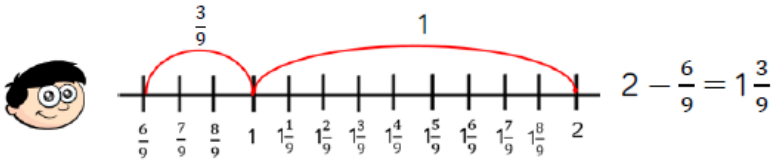


$2 - \frac{3}{4} = \frac{8}{4} - \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4}$

Use Jack's method to calculate.

$3 - \frac{3}{4} =$ $3 - \frac{3}{8} =$ $3 - \frac{7}{8} =$ $3 - \frac{15}{8} =$

Dexter uses a number line to find the difference between 2 and $\frac{6}{9}$

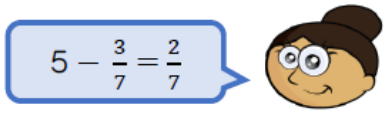


$2 - \frac{6}{9} = 1\frac{3}{9}$

Use a number line to find the difference between:

2 and $\frac{2}{3}$ 2 and $\frac{2}{5}$ $\frac{2}{5}$ and 4

Dora is subtracting a fraction from a whole.



Can you spot her mistake?

What should the answer be?

How many ways can you make the statement correct?

$2 - \square = \frac{5}{8} + \square$

Whitney has a piece of ribbon that is 3 metres long.

She cuts it into 12 equal pieces and gives Teddy 3 pieces.

How many metres of ribbon does Whitney have left?

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Fri			L.O. Success Criteria		SEN – L.O.			Exceeding ARE: At ARE: Below ARE: SEND PPG EAL