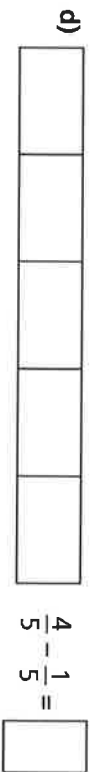
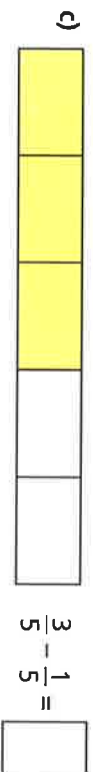
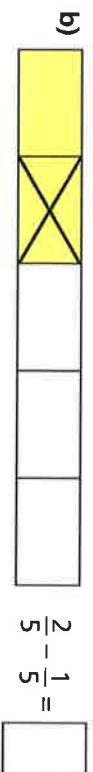
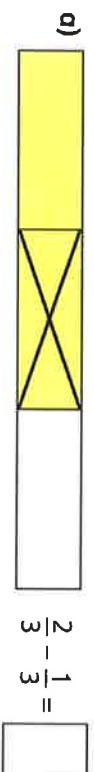


Subtract fractions

1

Complete the subtractions.

Use the bar models to help you.




2

Jack has $\frac{7}{8}$ of a chocolate bar.

He eats $\frac{4}{8}$ of the chocolate bar.

What fraction of the chocolate bar does he have left?

Jack has  of the chocolate bar left.



3

Complete the subtractions.

Simplify your answers where possible.

a) $\frac{7}{10} - \frac{1}{10} = \square = \square$

e) $\frac{8}{12} - \frac{4}{12} = \square = \square$

b) $\frac{7}{10} - \frac{2}{10} = \square = \square$

f) $\frac{9}{12} - \frac{5}{12} = \square = \square$

c) $\frac{7}{10} - \frac{3}{10} = \square = \square$

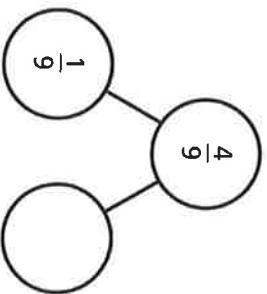
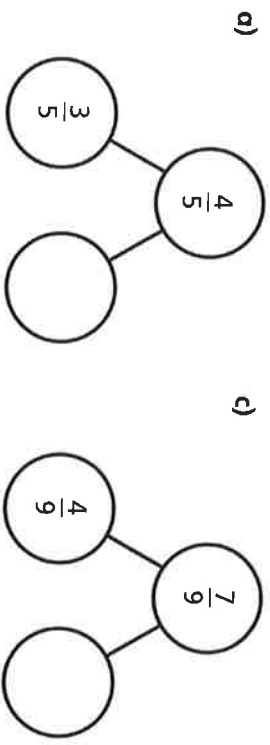
g) $\frac{9}{59} - \frac{5}{59} = \square$

d) $\frac{7}{12} - \frac{3}{12} = \square = \square$

h) $\frac{13}{127} - \frac{9}{127} = \square$

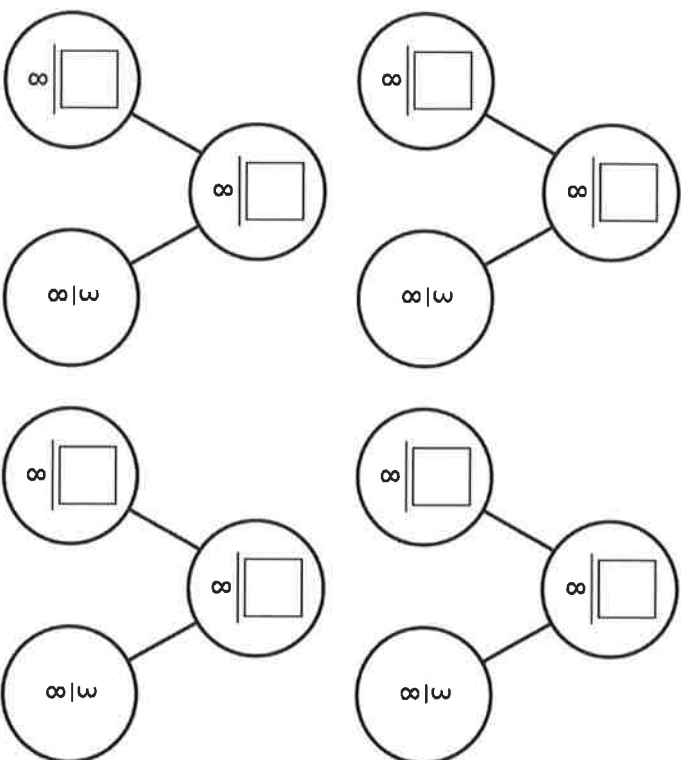
4

Complete the part-whole models.



5

Complete the part-whole model in four different ways.

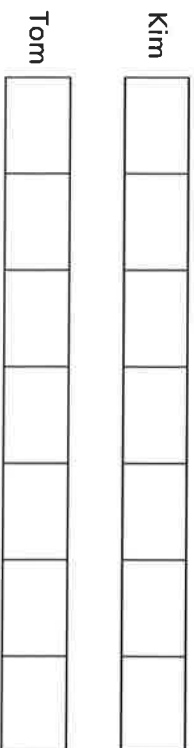


6

Kim has read $\frac{6}{7}$ of her book.

Tom has read $\frac{2}{7}$ of his book.

a) Shade the bar models to represent this information.



b) How much more has Kim read than Tom?

Kim has read

more of her book than Tom.



7

Write the missing numerators.

a) $\frac{8}{9} - \frac{\square}{9} = \frac{7}{9}$

e) $\frac{7}{10} - \frac{5}{10} = \frac{1}{10} + \frac{\square}{10}$

b) $\frac{5}{11} - \frac{\square}{11} = \frac{4}{11}$

f) $\frac{\square}{4} - \frac{1}{4} = \frac{1}{4} + \frac{1}{4}$

c) $\frac{8}{9} - \frac{\square}{9} = \frac{3}{9} + \frac{4}{9}$



g) $\frac{\square}{5} - \frac{2}{5} = \frac{1}{5} + \frac{2}{5}$



d) $\frac{7}{9} - \frac{5}{9} = \frac{\square}{9} - \frac{4}{9}$

h) $\frac{4}{5} + \frac{1}{5} = \frac{3}{7} - \frac{2}{7} + \frac{\square}{7}$

8

Complete the table to show three possible values of the square and triangle.

		$\frac{\square}{92} - \frac{\square}{92} = \frac{13}{92}$
---	---	---


How many other answers can you find?


Subtract fractions


1

Complete the subtractions.

Use the bar models to help you.

a)  $\frac{2}{3} - \frac{1}{3} = \boxed{\frac{1}{3}}$

b)  $\frac{2}{5} - \frac{1}{5} = \boxed{\frac{1}{5}}$

c)  $\frac{3}{5} - \frac{1}{5} = \boxed{\frac{2}{5}}$

d)  $\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$

2

Jack has $\frac{7}{8}$ of a chocolate bar.

He eats $\frac{4}{8}$ of the chocolate bar.

What fraction of the chocolate bar does he have left?

Jack has

$\boxed{\frac{3}{8}}$

of the chocolate bar left.



3

Complete the subtractions.

Simplify your answers where possible.

a) $\frac{7}{10} - \frac{1}{10} = \boxed{\frac{6}{10}} = \boxed{\frac{3}{5}}$

e) $\frac{8}{12} - \frac{4}{12} = \boxed{\frac{4}{12}} = \boxed{\frac{1}{3}}$

b) $\frac{7}{10} - \frac{2}{10} = \boxed{\frac{5}{10}} = \boxed{\frac{1}{2}}$

f) $\frac{9}{12} - \frac{5}{12} = \boxed{\frac{4}{12}} = \boxed{\frac{1}{3}}$

c) $\frac{7}{10} - \frac{3}{10} = \boxed{\frac{4}{10}} = \boxed{\frac{2}{5}}$

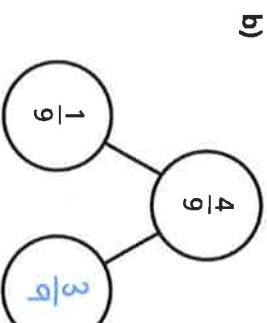
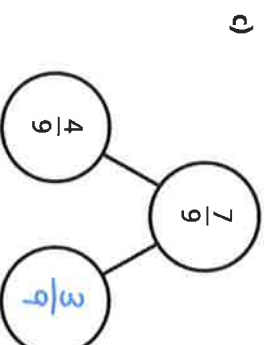
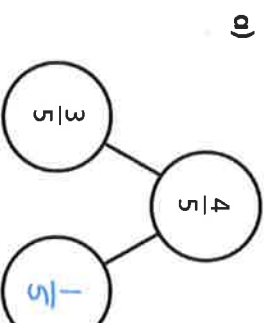
g) $\frac{9}{59} - \frac{5}{59} = \boxed{\frac{4}{59}}$

d) $\frac{7}{12} - \frac{3}{12} = \boxed{\frac{4}{12}} = \boxed{\frac{1}{3}}$

h) $\frac{13}{127} - \frac{9}{127} = \boxed{\frac{4}{127}}$

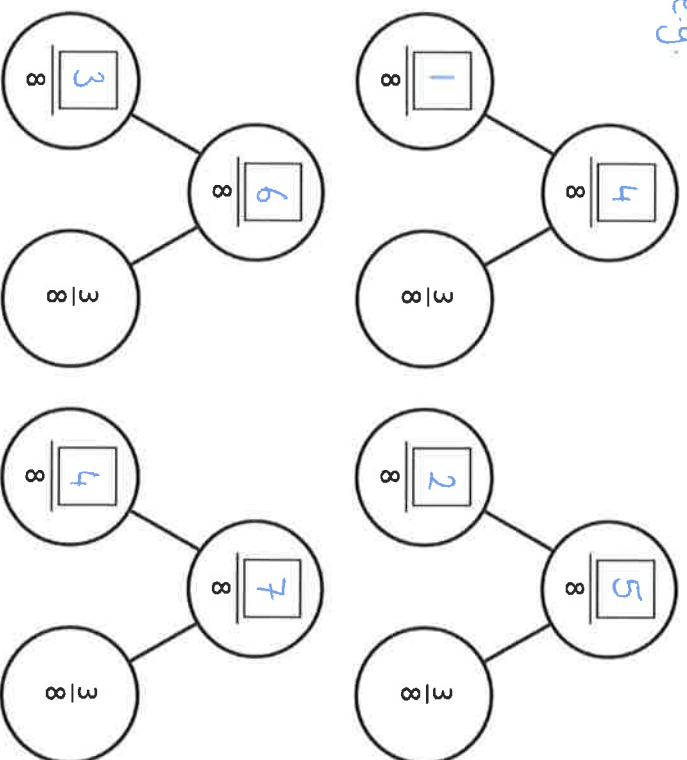
4

Complete the part-whole models.



- 5 Complete the part-whole model in four different ways.

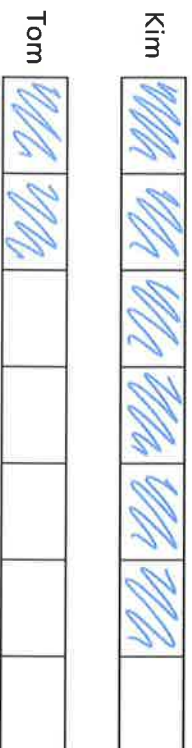
e.g.



- 6 Kim has read $\frac{6}{7}$ of her book.

Tom has read $\frac{2}{7}$ of his book.

- a) Shade the bar models to represent this information.



- b) How much more has Kim read than Tom?

Kim has read $\frac{4}{7}$ more of her book than Tom.

- 7 Write the missing numerators.

a) $\frac{8}{9} - \frac{\boxed{1}}{9} = \frac{7}{9}$

e) $\frac{7}{10} - \frac{5}{10} = \frac{1}{10} + \frac{\boxed{1}}{10}$

b) $\frac{5}{11} - \frac{\boxed{1}}{11} = \frac{4}{11}$

f) $\frac{\boxed{3}}{4} - \frac{1}{4} = \frac{1}{4} + \frac{1}{4}$

c) $\frac{8}{9} - \frac{\boxed{1}}{9} = \frac{3}{9} + \frac{4}{9}$

g) $\frac{\boxed{5}}{5} - \frac{2}{5} = \frac{1}{5} + \frac{2}{5}$

d) $\frac{7}{9} - \frac{5}{9} = \frac{\boxed{6}}{9} - \frac{4}{9}$

h) $\frac{4}{5} + \frac{1}{5} = \frac{3}{7} - \frac{2}{7} + \frac{\boxed{6}}{7}$

- 8

Complete the table to show three possible values of the square and triangle.

e.g.

14	1
20	7
30	17

How many other answers can you find?

Subtract 2 Fractions

Notes and Guidance

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.

Mathematical Talk

Have you used take away or difference to subtract the eighths using the strips of paper? How are they the same? How are they different?

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?

Varied Fluency

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

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

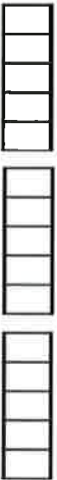
Use the bar models to subtract the fractions.



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

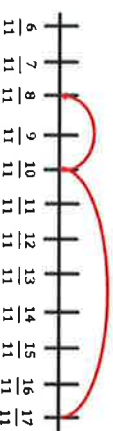


$$\frac{11}{6} - \frac{5}{6} =$$



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

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



Use a number line to solve:

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

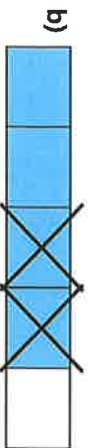
Subtract 2 fractions

1

Complete the subtractions.



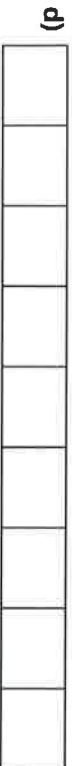
$$\frac{4}{5} - \frac{1}{5} = \square$$



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



$$\frac{5}{7} - \frac{3}{7} = \square$$



$$\frac{7}{9} - \frac{4}{9} = \square$$



2

Complete the calculations.

a) $\frac{7}{10} - \frac{3}{10} = \square$

e) $\frac{9}{11} - \frac{3}{11} = \square$

b) $\frac{2}{3} - \frac{1}{3} = \square$

f) $\frac{6}{7} - \frac{4}{7} = \square$

c) $\frac{6}{6} - \frac{6}{6} = \square$

g) $\frac{8}{93} - \frac{2}{93} = \square$

d) $\frac{3}{4} - \frac{1}{4} = \square$

h) $\frac{10}{991} - \frac{3}{991} = \square$

3

Complete the subtractions

a) $\frac{9}{5} - \frac{6}{5} = \square$

e) $\frac{8}{3} - \frac{4}{3} = \square = \square$

b) $\frac{9}{5} - \frac{5}{5} = \square$

f) $\frac{11}{3} - \frac{4}{3} = \square = \square$

c) $\frac{9}{5} - \frac{4}{5} = \square = \square$

g) $\frac{14}{3} - \frac{4}{3} = \square = \square$

d) $\frac{9}{2} - \frac{4}{2} = \square = \square$

h) $\frac{15}{3} - \frac{5}{3} = \square = \square$

- 4 Jack has $2\frac{1}{4}$ kg of potatoes.

He uses $\frac{5}{4}$ kg of potatoes.

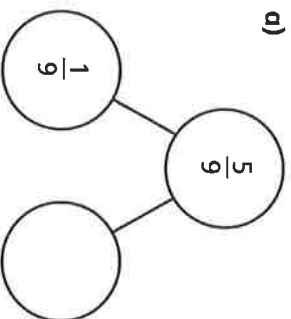
How many kilograms does he have left?



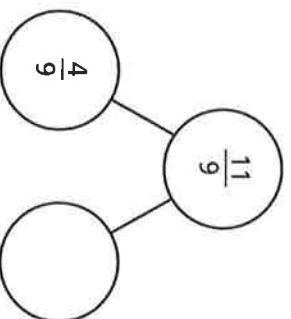
Jack has kg left.

- 5 Complete the part-whole models.

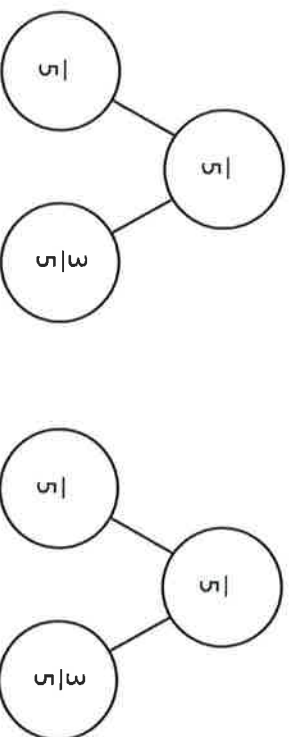
a)



b)



- 6 Complete the part-whole model in two different ways.



- 7 Fill in the missing numerators.

a) $\frac{10}{11} - \frac{\boxed{}}{11} = \frac{7}{11}$

d) $\frac{15}{4} - \frac{\boxed{}}{4} = 2$

b) $\frac{10}{11} - \frac{\boxed{}}{11} = \frac{7}{11} - \frac{4}{11}$

e) $\frac{9}{4} - \frac{1}{4} = \frac{\boxed{}}{4} + 1$

c) $\frac{10}{11} - \frac{4}{11} = \frac{\boxed{}}{11} - \frac{7}{11}$

f) $\frac{11}{4} - \frac{3}{4} = \frac{11}{3} - \frac{\boxed{}}{3}$

- 8

Alex and Annie are taking turns playing a computer game.

Annie plays for a total of $2\frac{1}{4}$ hours.

Annie plays for $\frac{3}{4}$ of an hour more than Alex.

How much time do they spend in total playing on the game?

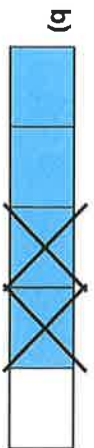
hours

Subtract 2 fractions

1 Complete the subtractions.



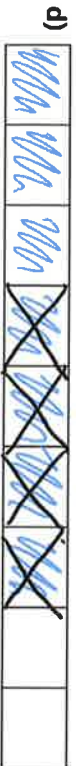
$$\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$$



$$\frac{4}{5} - \frac{2}{5} = \boxed{\frac{2}{5}}$$



$$\frac{5}{7} - \frac{2}{7} = \boxed{\frac{3}{7}}$$



$$\frac{7}{9} - \frac{2}{9} = \boxed{\frac{5}{9}}$$

2 Complete the calculations.

a) $\frac{7}{10} - \frac{3}{10} = \boxed{\frac{4}{10}}$

e) $\frac{9}{11} - \frac{3}{11} = \boxed{\frac{6}{11}}$

b) $\frac{2}{3} - \frac{1}{3} = \boxed{\frac{1}{3}}$

f) $\frac{6}{7} - \frac{4}{7} = \boxed{\frac{2}{7}}$

c) $\frac{6}{6} - \frac{6}{6} = \boxed{0}$

g) $\frac{8}{93} - \frac{2}{93} = \boxed{\frac{6}{93}}$

d) $\frac{3}{4} - \frac{1}{4} = \boxed{\frac{2}{4}}$

h) $\frac{10}{991} - \frac{3}{991} = \boxed{\frac{7}{991}}$

3 Complete the subtractions

a) $\frac{9}{5} - \frac{6}{5} = \boxed{\frac{3}{5}}$

e) $\frac{8}{3} - \frac{4}{3} = \boxed{\frac{4}{3}} = \boxed{1\frac{1}{3}}$

b) $\frac{9}{5} - \frac{5}{5} = \boxed{\frac{4}{5}}$

f) $\frac{11}{3} - \frac{4}{3} = \boxed{\frac{7}{3}} = \boxed{2\frac{1}{3}}$

c) $\frac{9}{5} - \frac{4}{5} = \boxed{\frac{5}{5}} = \boxed{1}$

g) $\frac{14}{3} - \frac{4}{3} = \boxed{\frac{10}{3}} = \boxed{3\frac{1}{3}}$

d) $\frac{9}{2} - \frac{4}{2} = \boxed{\frac{5}{2}} = \boxed{2\frac{1}{2}}$

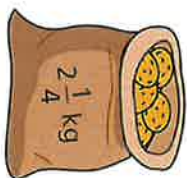
h) $\frac{15}{3} - \frac{5}{3} = \boxed{\frac{10}{3}} = \boxed{3\frac{1}{3}}$



- 4 Jack has $2\frac{1}{4}$ kg of potatoes.

He uses $\frac{5}{4}$ kg of potatoes.

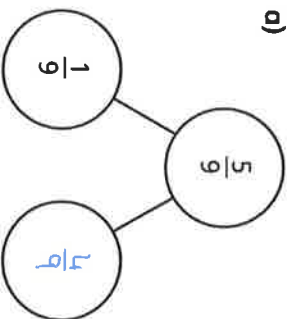
How many kilograms does he have left?



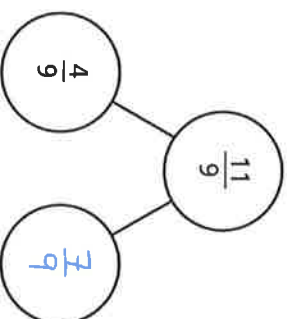
Jack has kg left.

- 5 Complete the part-whole models.

a)

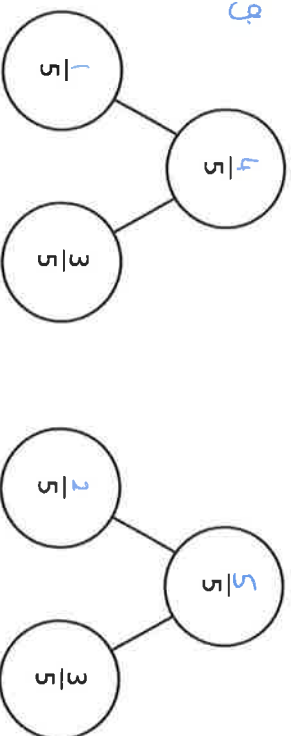


b)



- 6 Complete the part-whole model in two different ways.

e.g.



- 7 Fill in the missing numerators.

a) $\frac{10}{11} - \frac{\boxed{3}}{11} = \frac{7}{11}$

d) $\frac{15}{4} - \frac{\boxed{7}}{4} = 2$

b) $\frac{10}{11} - \frac{\boxed{7}}{11} = \frac{7}{11} - \frac{4}{11}$

e) $\frac{9}{4} - \frac{1}{4} = \frac{\boxed{4}}{4} + 1$

c) $\frac{10}{11} - \frac{4}{11} = \frac{\boxed{13}}{11} - \frac{7}{11}$

f) $\frac{11}{4} - \frac{3}{4} = \frac{11}{3} - \frac{\boxed{5}}{3}$

- 8

Alex and Annie are taking turns playing a computer game.

Annie plays for a total of $2\frac{1}{4}$ hours.

Annie plays for $\frac{3}{4}$ of an hour more than Alex.

How much time do they spend in total playing on the game?

hours

Subtract 2 Fractions

Reasoning and Problem Solving

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?	$\frac{7}{8} - \frac{3}{8} = -$

1st question matches with second calculation.
2nd question with first calculation.
3rd question with third calculation.

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

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

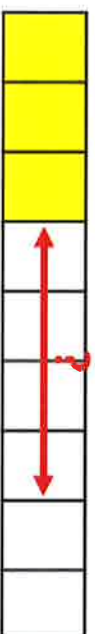
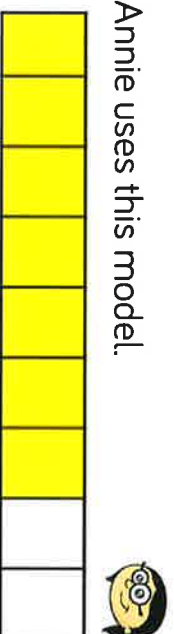
$$\square - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

Children may give a range of answers as long as the calculation for the numerators is correct.

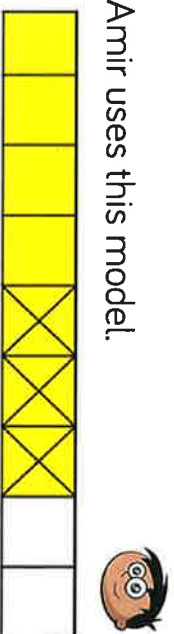
Annie and Amir are working out the answer to this problem.

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

Annie uses this model.



Amir uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

They are both correct. The first model shows finding the difference and the second model shows take away.

Ensure the number stories match the model of subtraction. For Annie's this will be finding the difference. For Amir this will be take away.

Subtract from Whole Amounts

Notes and Guidance

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. $\frac{9}{9} = 1$, $\frac{18}{9} = 2$ etc.

Mathematical Talk

What do you notice about the numerator and denominator when a fraction is equal to one whole?

Using Jack's method, what's the same about your bar models? What's different?

How many more thirds/quarters/ninths do you need to make one whole?

Varied Fluency

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

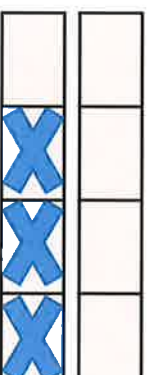
$$\frac{9}{9} - \frac{4}{9} = \boxed{5}$$

$$\frac{9}{9} - \frac{2}{9} = \frac{2}{9}$$

$$\frac{13}{9} - \frac{9}{9} = \boxed{4}$$

What's the same? What's different?

Jack uses a bar model to subtract fractions.

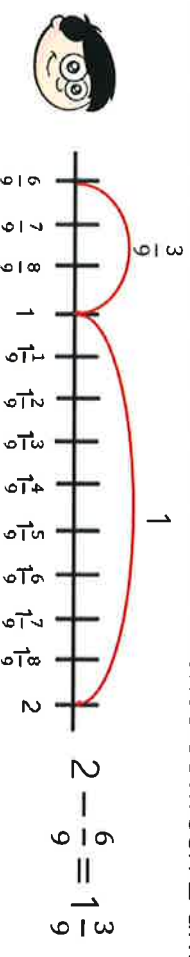


$$2 - \frac{3}{4} = \frac{8}{4} - \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4}$$

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:

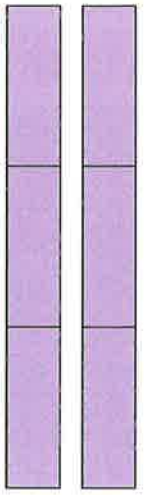
$$2 \text{ and } \frac{2}{3} \qquad 2 \text{ and } \frac{2}{5} \qquad \frac{2}{5} \text{ and } 4$$

Subtract from whole amounts

1

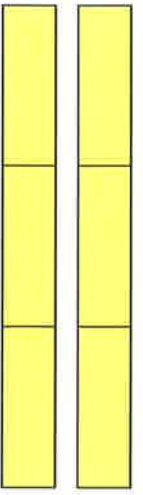
Use the bar models to help you subtract the fractions.

a)



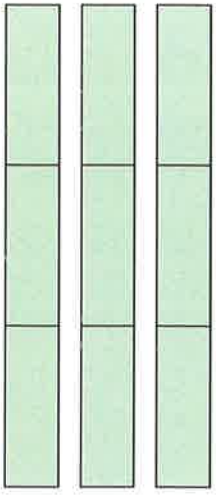
$$2 - \frac{2}{3} = \boxed{}$$

b)



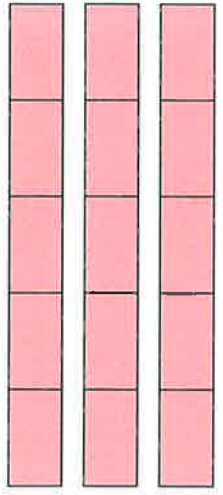
$$2 - \frac{5}{3} = \boxed{}$$

c)



$$3 - \frac{5}{3} = \boxed{}$$

d)



$$3 - \frac{8}{5} = \boxed{}$$



2

Complete the subtractions.

a) $\frac{8}{8} - \frac{5}{8} = \boxed{}$

d) $2 - \frac{5}{7} = \boxed{}$

b) $1 - \frac{5}{8} = \boxed{}$

e) $4 - \frac{5}{7} = \boxed{}$

c) $2 - \frac{5}{8} = \boxed{}$

f) $4 - \frac{7}{5} = \boxed{}$

3

Match the numbers with a difference of $\frac{3}{4}$

3

$2\frac{3}{4}$

1

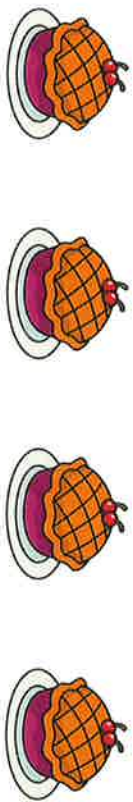
$\frac{1}{4}$

2

$\frac{9}{4}$

4

Aisha has 4 pies.



a) Aisha gives $\frac{5}{8}$ of a pie to Mo.

How many pies does Aisha have left?

Aisha has



whole pies and



of a pie left.

b) Aisha then gives 2 pies to Jack.

Calculate the difference between how much pie Aisha now has and how much pie Mo has.

5

Alex is subtracting fractions.



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

Explain why Alex is incorrect.

6

Complete the calculations.

a) $3 - \square = 2\frac{3}{10}$

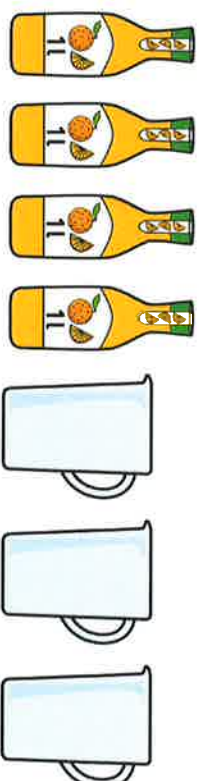
c) $\square - \frac{7}{12} = 3\frac{5}{12}$

b) $4 - \square = 3\frac{3}{8}$

d) $\square - \frac{5}{12} = 13\frac{7}{12}$

7

Teddy has 4 litres of juice and 3 jugs.



Teddy pours $\frac{3}{4}$ of a litre into each jug.
How much juice does Teddy have left?

Teddy has



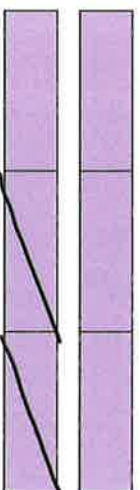
litres of juice left.



Subtract from whole amounts

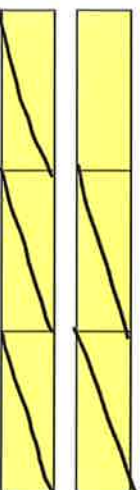
1 Use the bar models to help you subtract the fractions.

a)



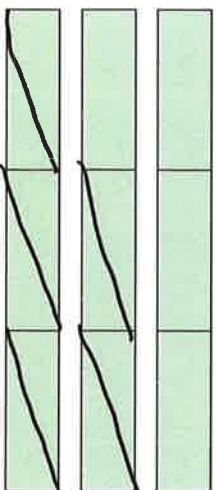
$$2 - \frac{2}{3} = 1\frac{1}{3}$$

b)



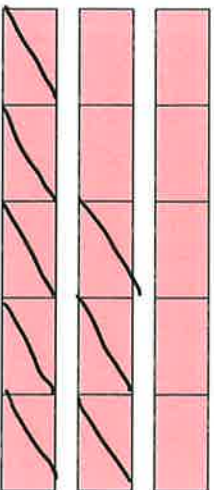
$$2 - \frac{5}{3} = 1\frac{1}{3}$$

c)



$$3 - \frac{5}{3} = 1\frac{1}{3}$$

d)



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



2 Complete the subtractions.

a) $\frac{8}{8} - \frac{5}{8} = \frac{3}{8}$

d) $2 - \frac{5}{7} = 1\frac{2}{7}$

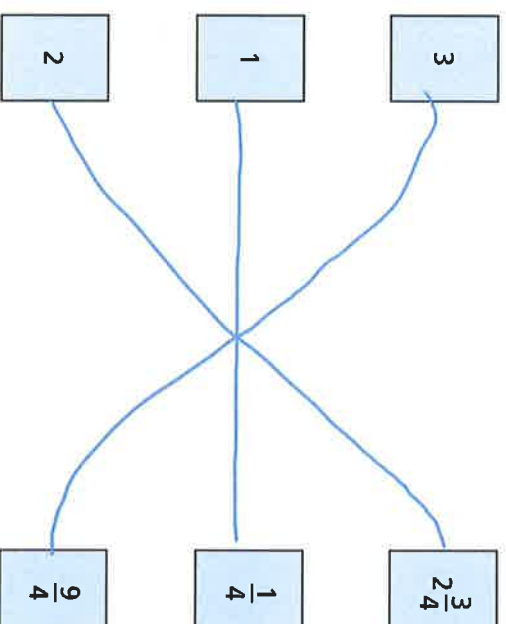
b) $1 - \frac{5}{8} = \frac{3}{8}$

e) $4 - \frac{5}{7} = 3\frac{2}{7}$

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

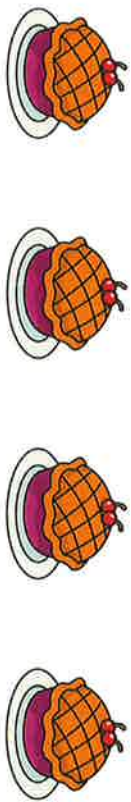
f) $4 - \frac{7}{5} = 2\frac{3}{5}$

3 Match the numbers with a difference of $\frac{3}{4}$



4

Aisha has 4 pies.



a) Aisha gives $\frac{5}{8}$ of a pie to Mo.

How many pies does Aisha have left?

Aisha has $\boxed{3}$ whole pies and $\boxed{\frac{3}{8}}$ of a pie left.

b) Aisha then gives 2 pies to Jack.

Calculate the difference between how much pie Aisha now has and how much pie Mo has.

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

of a pie

5

Alex is subtracting fractions.



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

Explain why Alex is incorrect.

6

Complete the calculations.

a) $3 - \boxed{\frac{7}{10}} = 2\frac{3}{10}$

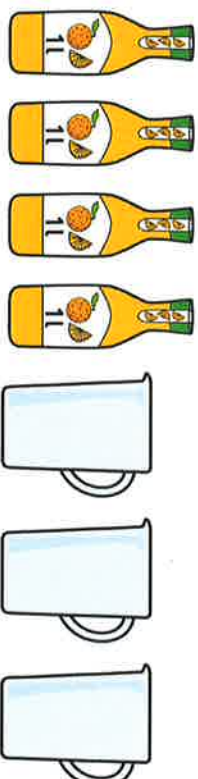
c) $\boxed{4} - \frac{7}{12} = 3\frac{5}{12}$

b) $4 - \boxed{\frac{5}{8}} = 3\frac{3}{8}$

d) $\boxed{14} - \frac{5}{12} = 13\frac{7}{12}$

7

Teddy has 4 litres of juice and 3 jugs.



Teddy pours $\frac{3}{4}$ of a litre into each jug.
How much juice does Teddy have left?

Teddy has

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

litres of juice left.



Mastery Thursday 25th

Subtract from Whole Amounts

Reasoning and Problem Solving

Dora is subtracting a fraction from a whole.

$$5 - \frac{3}{7} = \frac{2}{7}$$



Can you spot her mistake?

What should the answer be?

How many ways can you make the statement correct?

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

Dora has not recognised that 5 is equivalent to $\frac{35}{7}$

$$5 - \frac{3}{7} = \frac{33}{7} = 4\frac{5}{7}$$

Lots of possible responses.

e.g.

$$2 - \frac{1}{8} = \frac{5}{8} + \frac{10}{8}$$

$$2 - \frac{7}{8} = \frac{5}{8} + \frac{4}{8}$$

$$2 - \frac{9}{8} = \frac{5}{8} + \frac{2}{8}$$

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?

Cutting 3 metres of ribbon into 12 pieces means each metre of ribbon will be in 4 equal pieces.

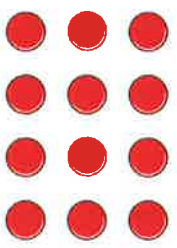
Whitney will have $\frac{12}{4}$ to begin with.

$$\frac{12}{4} - \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$$

Whitney has $2\frac{1}{4}$ metres of ribbon left.

Fractions of a set of objects (1)

1 Here are some counters.




a) Circle $\frac{1}{4}$ of the counters.

b) How many counters did you circle?


c) What is $\frac{1}{4}$ of 12?

2 Draw counters in the bar models to help you complete each number sentence. The first one has been done for you.

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

b) $\frac{1}{2}$ of 16 = 

c) $\frac{1}{4}$ of 8 = 

d) $\frac{1}{4}$ of 16 = 



3



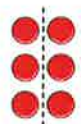
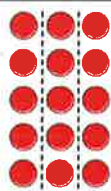
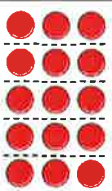
To find a half I need to divide by 2

Do you agree with Dexter? _____

Talk about it with a partner.

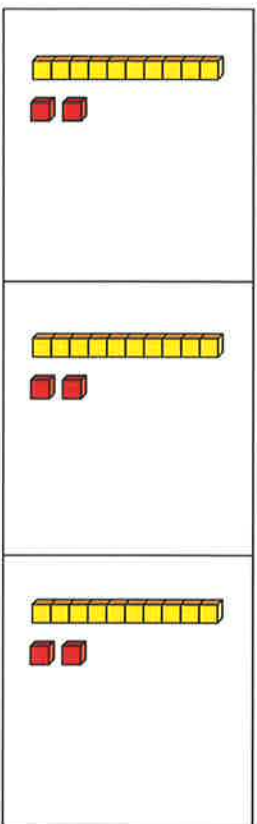
4

Complete the table.

Fraction	Division	Example	Drawing
one half	divide by 2	$\frac{1}{2}$ of 6 = 3	
one quarter		$\frac{1}{4}$ of 8 = 2	
			
			



- 5 Huan uses a bar model and base 10 to find $\frac{1}{3}$ of 36



Use Huan's method to complete the calculations.

- a) $\frac{1}{3}$ of 63 = c) $\frac{1}{4}$ of 92 =
- b) $\frac{1}{4}$ of 48 =

- 6 Nijah uses a bar model and place value counters to find $\frac{1}{3}$ of 36



Use Nijah's method to complete the calculations.

- a) $\frac{1}{3}$ of 96 = c) $\frac{1}{4}$ of 52 =
- b) $\frac{1}{5}$ of 60 =

- 7 Which amount is greater? Tick your answer.

$\frac{1}{3}$ of £75

or

$\frac{1}{5}$ of £75

Show your workings.

- 8 Complete the number sentences.

- a) $\frac{1}{2}$ of = 30 c) $\frac{1}{5}$ of = 50
- b) $\frac{1}{4}$ of = 20

- 9 Rosie, Amir and Alex each find a fraction of 24 using counters.

Rosie: I have $\frac{1}{6}$ of 24

Alex: I have 6 counters.

Amir: I have $\frac{1}{3}$ of 24

- a) Order the children from least counters to most counters.

least counters

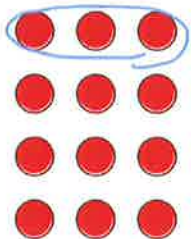
most counters

- b) What fraction of the counters does Alex have?
- c) Rosie and Amir put their counters together.

Write their total number of counters as a fraction of 24

Fractions of a set of objects (1)

1 Here are some counters.



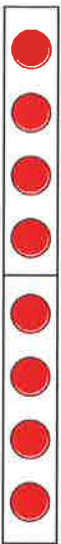
a) Circle $\frac{1}{4}$ of the counters.

b) How many counters did you circle? 3

c) What is $\frac{1}{4}$ of 12? 3

2 Draw counters in the bar models to help you complete each number sentence. The first one has been done for you.

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



b) $\frac{1}{2}$ of 16 = 8



c) $\frac{1}{4}$ of 8 = 2



d) $\frac{1}{4}$ of 16 = 4



3



To find a half I need
to divide by 2

Do you agree with Dexter? yes

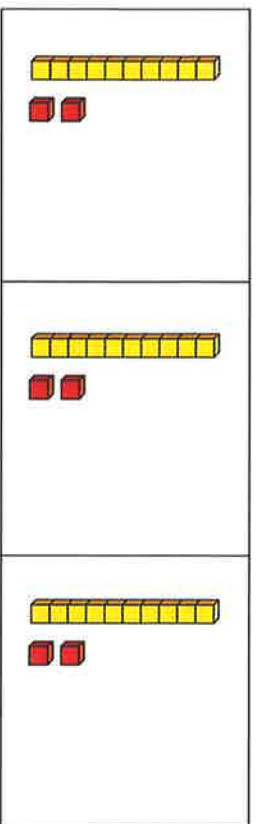
Talk about it with a partner.

4

Complete the table.

Fraction	Division	Example	Drawing
one half	divide by 2	$\frac{1}{2}$ of 6 = 3	
one quarter	divide by 4	$\frac{1}{4}$ of 8 = 2	
one third	divide by 3	$\frac{1}{3}$ of 15 = 5	
one fifth	divide by 5	$\frac{1}{5}$ of 15 = 3	

- 5 Huan uses a bar model and base 10 to find $\frac{1}{3}$ of 36



Use Huan's method to complete the calculations.

- a) $\frac{1}{3}$ of 63 = c) $\frac{1}{4}$ of 92 =
- b) $\frac{1}{4}$ of 48 =

- 6 Nijah uses a bar model and place value counters to find $\frac{1}{3}$ of 36



Use Nijah's method to complete the calculations.

- a) $\frac{1}{3}$ of 96 = c) $\frac{1}{4}$ of 52 =
- b) $\frac{1}{5}$ of 60 =

- 7 Which amount is greater? Tick your answer.

☒ $\frac{1}{3}$ of £75

or

☐ $\frac{1}{5}$ of £75

Show your workings.

- 8 Complete the number sentences.

a) $\frac{1}{2}$ of = 30 c) $\frac{1}{5}$ of = 50

b) $\frac{1}{4}$ of = 20

- 9 Rosie, Amir and Alex each find a fraction of 24 using counters.

Rosie: I have $\frac{1}{6}$ of 24

Alex: I have $\frac{1}{3}$ of 24

Amir: I have 6 counters.

- a) Order the children from least counters to most counters.

Rosie

Alex

Amir

least counters

most counters

- b) What fraction of the counters does Alex have?
- c) Rosie and Amir put their counters together.

Write their total number of counters as a fraction of 24

Year 4 Pack 7 Target your Maths answers. Please mark all questions.

7

Page 31

A

1 A 8	2 D 8	3 K 6	4 P 3
B 7	E 5	L 6	Q 5
C 9	F 7	M 8	R 7

B

1 S 6	2 X 7	3 B 11	4 E 2
T 8	Y 4	C 9	F 8
U 9	Z 11	D 7	G 10

C

1 J 9	2 M 21	3 Q 10	4 T 20
K 14	N 13	R 17	U 11
L 18	P 15	S 20	V 15

Page 32

A

1 20	7 9	13 8	19 22
2 12	8 7	14 5	20 30
3 15	9 16	15 7	21 5
4 100	10 60	16 12	22 1
5 11	11 110	17 45	23 8
6 9	12 8	18 70	24 12

B

1 8	10 10	19 36	28 11
2 9	11 20	20 20	29 7
3 120	12 55	21 32	30 5
4 14	13 15	22 21	31 9
5 6	14 24	23 32	32 4
6 11	15 56	24 96	33 11
7 40	16 30	25 8	34 6
8 50	17 44	26 9	35 12
9 12	18 64	27 6	36 9

C

1 5	10 9	19 240	28 40
2 10	11 3	20 360	29 110
3 40	12 44	21 480	30 40
4 24	13 270	22 330	31 120
5 1	14 280	23 480	32 70
6 12	15 880	24 720	33 100
7 20	16 180	25 100	34 70
8 56	17 160	26 60	35 80
9 3	18 240	27 80	36 120

Page 33

A

1 18	7 24	13 5	19 2
2 42	8 72	14 9	20 6
3 30	9 0	15 4	21 10
4 60	10 48	16 7	22 3
5 12	11 6	17 11	23 8
6 54	12 36	18 1	24 12

B

1 4	7 66	13 9	19 42
2 6	8 30	14 0	20 72
3 60	9 5	15 12	21 a) 8
4 48	10 12	16 54	b) 20
5 1	11 24	17 3	c) 11
6 8	12 36	18 7	

C

1 120	10 100	19 144	28 9
2 480	11 60	20 108	29 4
3 720	12 110	21 60	30 8
4 420	13 70	22 96	31 3
5 180	14 90	23 36	32 6
6 360	15 50	24 72	33 a) 144
7 240	16 80	25 5	b) 180
8 540	17 48	26 7	c) 480
9 30	18 84	27 2	

Page 34

A

1 14	7 21	13 3	19 1
2 42	8 63	14 8	20 6
3 28	9 0	15 5	21 9
4 56	10 49	16 10	22 4
5 77	11 70	17 12	23 11
6 35	12 84	18 7	24 2

B

1 4	7 3	13 42	19 77
2 7	8 5	14 70	20 35
3 12	9 1	15 7	21 14
4 9	10 8	16 56	22 63
5 0	11 2	17 21	23 28
6 6	12 11	18 49	24 84

C

1 140	9 30	17 28	25 56
2 350	10 80	18 84	26 84
3 630	11 120	19 42	27 147
4 420	12 50	20 98	28 364
5 770	13 70	21 70	29 6
6 560	14 40	22 126	30 13
7 280	15 90	23 154	31 21
8 490	16 60	24 112	32 35

Page 35

A

1 27	7 0	13 5	19 10
2 54	8 72	14 9	20 12
3 90	9 9	15 2	21 3
4 81	10 108	16 11	22 8
5 99	11 36	17 4	23 1
6 45	12 63	18 7	24 6

B

1 2	7 9	13 63	19 45
2 7	8 5	14 90	20 54
3 4	9 3	15 18	21 36
4 10	10 12	16 81	22 9
5 1	11 0	17 27	23 72
6 6	12 8	18 99	24 108

C

1 450	8 630	15 10	22 80
2 810	9 90	16 90	23 50
3 180	10 360	17 40	24 110
4 990	11 1080	18 60	25 £576
5 720	12 540	19 100	26 333 kg
6 900	13 30	20 120	27 648
7 270	14 70	21 20	

Page 21

A		B		C
1 25	17 74	1 1353	17 3607	1 440
2 70	18 91	2 78	18 7608	2 370
3 93	19 65	3 495	19 3940	3 1009
4 521	20 44	4 113	20 144	4 1800
5 76	21 97	5 6905	21 3105	5 380
6 730	22 79	6 2542	22 122	6 78
7 54	23 85	7 9932	23 34	7 227
8 726	24 25	8 5992	24 116	8 250
9 27	25 55	9 3070	25 81	9 5·1
10 398	26 74	10 55	26 35	10 33
11 36	27 42	11 7329	27 69	11 46
12 7	28 97	12 8574	28 96	12 159 200
13 12	29 27	13 1120	29 47	13 360
14 82	30 64	14 4005	30 74	14 2·7
15 87	31 49	15 67	31 19	15 146
16 262		16 131		16 737
				17 86
				18 16 000

Page 22

A

1 81	6 294	11 493
2 98	7 407	12 342
3 127	8 638	13 440 g
4 83	9 435	
5 150	10 714	

B

1 2664	6 3830	11 6306
2 2820	7 7047	12 8782
3 <u>4058</u> 4058	8 6463	13 4704
4 3436	9 7828	
5 8843	10 9468	

C

1 28 522	6 65 480	11 96 651
2 54 370	7 83 324	12 72 465
3 60 732	8 90 370	13 £35 334
4 99 083	9 84 461	14 84 131
5 55 511	10 64 171	

Page 23

A

1 276	6 552	11 427
2 592	7 921	12 342
3 438	8 701	13 405
4 776	9 945	
5 729	10 810	

B

1 8489	6 9139	11 4032
2 3932	7 6522	12 9441
3 7560	8 8620	13 £5963
4 4726	9 9816	
5 4386	10 6464	

C

1 32 421	6 69 230	11 £96 462
2 59 214	7 55 163	12 84 311
3 60 625	8 50 430	13 56 077
4 80 434	9 80 614	
5 48 370	10 91 850	

Page 24

A

1 327	5 234	9 456
2 157	6 275	10 342
3 618	7 119	11 133
4 430	8 141	12 162

B

1 263	6 2482	11 1478
2 674	7 4153	12 1283
3 3194	8 6236	13 1723
4 544	9 5856	
5 5180	10 428	

C

1 12282	6 58763	11 31666
2 12440	7 18358	12 35842
3 14123	8 11644	13 £3764
4 6588	9 47717	14 22957 kg
5 20853	10 34915	

Page 25

A

1 76	6 419	11 166
2 215	7 77	12 388
3 286	8 486	13 73
4 313	9 256	14 253
5 144	10 446	

B

1 815	6 1815	11 1452
2 2564	7 1080	12 4935
3 1492	8 4773	13 1453 miles
4 1327	9 2473	
5 2584	10 4965	

C

1 22 392	6 5652	11 39 447
2 12 805	7 7418	12 14 664
3 18 971	8 36 490	13 £4161
4 24 585	9 15 944	14 36 776
5 57 304	10 22 714	

Page 26

A

1 394	6 916	11 326
2 659	7 345	12 136
3 692	8 183	13 164
4 836	9 316	14 876
5 463	10 76	15 345m

B

1 2222	6 6742	11 3899
2 4060	7 4879	12 2503
3 7542	8 695	13 876
4 9517	9 2488	14 £6481
5 8015	10 4759	15 2652

C

1 72 263	6 87 203	11 6978
2 90 852	7 45 656	12 36 194
3 45 051	8 23 935	13 15 147
4 61 572	9 19 708	14 100 432
5 109 111	10 45 676	

Page 27

A

1 850	6 658	11 168
2 603	7 306	12 455
3 902	8 64	13 179
4 902	9 325	14 715 miles
5 490	10 268	15 66

B

1 9089	6 8304	11 820
2 8260	7 2295	12 1749
3 4063	8 3986	13 245 miles
4 5023	9 2573	14 8124
5 9416	10 4859	

C

1 69325	6 85063	11 15625
2 57954	7 19647	12 58968
3 71080	8 39934	13 95080
4 90433	9 15576	14 25558
5 61456	10 17197	15 12856

Page 28

A

1 79	5 71	9 109	13 770
2 143	6 49	10 129	14 870
3 184	7 26	11 58	15 260
4 102	8 84	12 72	16 370

B

1 251	5 6153	9 631	13 3902
2 329	6 5305	10 782	14 9696
3 39	7 7707	11 511	15 5408
4 384	8 1420	12 329	16 2512

C

1 2168	5 16840	9 2215	13 35757
2 2705	6 18198	10 4109	14 30603
3 1123	7 13374	11 4597	15 14844
4 2051	8 15322	12 1633	16 47307

Page 29

A

1

6	4	11
12	7	2
3	10	8

3

14	16	6
4	12	20
18	8	10

2

14	6	7
2	9	16
11	12	4

4

9	22	17
24	16	8
15	10	23

B

1

21	24	15
14	20	26
25	16	19

3

19	17	33
37	23	9
13	29	27

2

9	30	15
24	18	12
21	6	27

4

32	15	28
21	25	29
22	35	18

C

1

3	-2	-1
-4	0	4
1	2	-3

3

1	0	5
6	2	-2
-1	4	3

2

2	3	-2
-3	1	5
4	-1	0

4

-2	-1	6
9	1	-7
-4	3	4

Page 30

A

1 27 15 12 6 9 3	3 35 13 22 5 8 14	5 43 26 17 15 11 6
2 25 14 11 10 4 7	4 37 16 21 4 12 9	6 50 30 20 23 7 13

B

1 55 27 28 12 15 13 3 9 6 7	4 102 46 56 19 27 29 7 12 15 14
--------------------------------------	--

2 50
28 22
16 12 10
11 5 7 3

5 116
62 54
27 35 19
8 19 16 3

3 94
59 35
37 22 13
20 17 5 8

C

1 103
59 44
39 20 24
25 14 6 18

4 170
84 86
39 45 41
22 17 28 13

2 149
75 74
36 39 35
9 27 12 23

5 211
100 111
41 59 52
15 26 33 19

3 183
95 88
42 53 35
13 29 24 11

Isle Pack 7 English

Mon 22 nd Feb																											
Reading	<p>Read one of your assigned books on GetEpic. They are differentiated to match your Reading Range on AR. Class code: teq0763</p> <p>Take the week to read it through and then have a go at the quiz on Friday. Remember, if the book is shorter, you will need to read it more than once to remember the facts or story!</p> <p>You can also read your own book at home, there are lots to pick from on epic.</p>																										
Spelling	<p>Practise these spellings:</p> <table><tr><td>Year 4:</td><td>Year 5:</td></tr><tr><td>acted</td><td>available</td></tr><tr><td>acting</td><td>adorable</td></tr><tr><td>react</td><td>considerable</td></tr><tr><td>reacting</td><td>considerably</td></tr><tr><td>reaction</td><td>probably</td></tr><tr><td>activate</td><td>understandable</td></tr><tr><td>activation</td><td>horrible</td></tr><tr><td>deactivate</td><td>horribly</td></tr><tr><td>actor</td><td>incredible</td></tr><tr><td>actress</td><td>incredibly</td></tr><tr><td>activist</td><td>possible</td></tr><tr><td></td><td>sensibly</td></tr></table>	Year 4:	Year 5:	acted	available	acting	adorable	react	considerable	reacting	considerably	reaction	probably	activate	understandable	activation	horrible	deactivate	horribly	actor	incredible	actress	incredibly	activist	possible		sensibly
Year 4:	Year 5:																										
acted	available																										
acting	adorable																										
react	considerable																										
reacting	considerably																										
reaction	probably																										
activate	understandable																										
activation	horrible																										
deactivate	horribly																										
actor	incredible																										
actress	incredibly																										
activist	possible																										
	sensibly																										
Writing	<p>You will be starting the Wonderful Wizards unit of work. Read or listen to the model text on the wonderful world of wizards (p.4) before completing the activities What Do Words Mean? (p.5) and Which Synonym? (p.6)</p>																										

Tues 23 rd Feb																											
Reading	<p>Read one of your assigned books on GetEpic. They are differentiated to match your Reading Range on AR. Class code: teq0763</p> <p>Take the week to read it through and then have a go at the quiz on Friday. Remember, if the book is shorter, you will need to read it more than once to remember the facts or story! You can also read your own book at home, there are lots to pick from on epic.</p>																										
Spelling	<p>Practise your spellings from yesterday, revisiting those you got incorrect.</p> <table> <tr> <td>Year 4:</td><td>Year 5:</td></tr> <tr> <td>acted</td><td>available</td></tr> <tr> <td>acting</td><td>adorable</td></tr> <tr> <td>react</td><td>considerable</td></tr> <tr> <td>reacting</td><td>considerably</td></tr> <tr> <td>reaction</td><td>probably</td></tr> <tr> <td>activate</td><td>understandable</td></tr> <tr> <td>activation</td><td>horrible</td></tr> <tr> <td>deactivate</td><td>horribly</td></tr> <tr> <td>actor</td><td>incredible</td></tr> <tr> <td>actress</td><td>incredibly</td></tr> <tr> <td>activist</td><td>possible</td></tr> <tr> <td></td><td>sensibly</td></tr> </table>	Year 4:	Year 5:	acted	available	acting	adorable	react	considerable	reacting	considerably	reaction	probably	activate	understandable	activation	horrible	deactivate	horribly	actor	incredible	actress	incredibly	activist	possible		sensibly
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Handwriting	Select some of the definitions of the above spellings and copy in your neatest handwriting. I would select spellings/definitions you do not know very well.																										
Writing	Complete the activities Finish The Sentence (p.7) and Wizard Words (p.8/9)																										

Weds 24 th Feb	
Reading	<p>Read one of your assigned books on GetEpic. They are differentiated to match your Reading Range on AR. Class code: teq0763</p> <p>Take the week to read it through and then have a go at the quiz on Friday. Remember, if the book is shorter, you will need to read it more than once to remember the facts or story! You can also read your own book at home, there are lots to pick from on epic.</p>
Spelling	<p>Practise your common exception spellings in the back of your planner. Revisit any that you have got incorrect or do not understand what they mean. Remember that we would have moved on to the next column!</p>
Writing	<p>Complete the activities Wizard Comprehension (p10) and The 'fill the gaps' Game (p.12). You must read page 11 before completing the activity on page 12.</p>

Thurs 25 th Feb	
Reading	<p>Read one of your assigned books on GetEpic. They are differentiated to match your Reading Range on AR. Class code: teq0763</p> <p>Take the week to read it through and then have a go at the quiz on Friday. Remember, if the book is shorter, you will need to read it more than once to remember the facts or story! You can also read your own book at home, there are lots to pick from on epic.</p>
Spelling	<p>Year 4: How many other words can you find that contain the word 'act' in the beginning, middle or end? Make a list in your English books and don't repeat the same words that are in your spelling list.</p> <p>Year 5: How many other words can you find which use the suffixes able, ably, ible, ibly,? Make a list in your English books and don't repeat the same words that are in your spelling list.</p>
Writing	<p>Complete the activities Weasel Phrases (p.13) and Bossy Verbs, Leading Questions (p.14)</p>

Fri 26 th Feb																											
Reading	<p>Read one of your assigned books on GetEpic. They are differentiated to match your Reading Range on AR. Class code: teq0763</p> <p>Take the week to read it through and then have a go at the quiz on Friday. Remember, if the book is shorter, you will need to read it more than once to remember the facts or story! You can also read your own book at home, there are lots to pick from on epic.</p>																										
Spelling/ Handwriting	<p>Practise these spellings in neatly joined handwriting before asking a parent/guardian to test you.</p> <table> <tr> <td>Year 4:</td><td>Year 5:</td></tr> <tr> <td>acted</td><td>available</td></tr> <tr> <td>acting</td><td>adorable</td></tr> <tr> <td>react</td><td>considerable</td></tr> <tr> <td>reacting</td><td>considerably</td></tr> <tr> <td>reaction</td><td>probably</td></tr> <tr> <td>activate</td><td>understandable</td></tr> <tr> <td>activation</td><td>horrible</td></tr> <tr> <td>deactivate</td><td>horribly</td></tr> <tr> <td>actor</td><td>incredible</td></tr> <tr> <td>actress</td><td>incredibly</td></tr> <tr> <td>activist</td><td>possible</td></tr> <tr> <td></td><td>sensibly</td></tr> </table>	Year 4:	Year 5:	acted	available	acting	adorable	react	considerable	reacting	considerably	reaction	probably	activate	understandable	activation	horrible	deactivate	horribly	actor	incredible	actress	incredibly	activist	possible		sensibly
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Writing	Complete the activities Alliteration (p.15) and Design Your School (p.16).																										

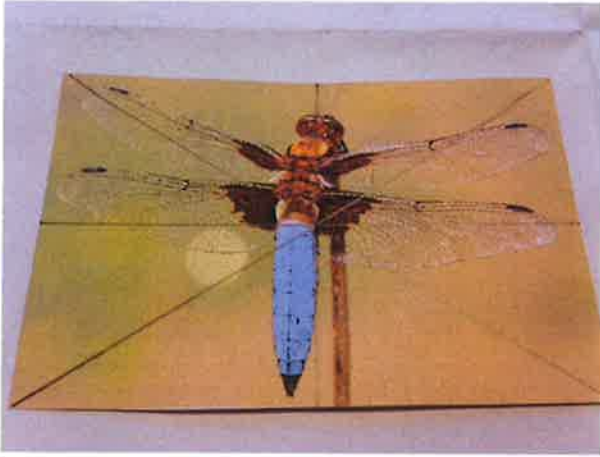
HELP THAT WE

Wednesday 24th

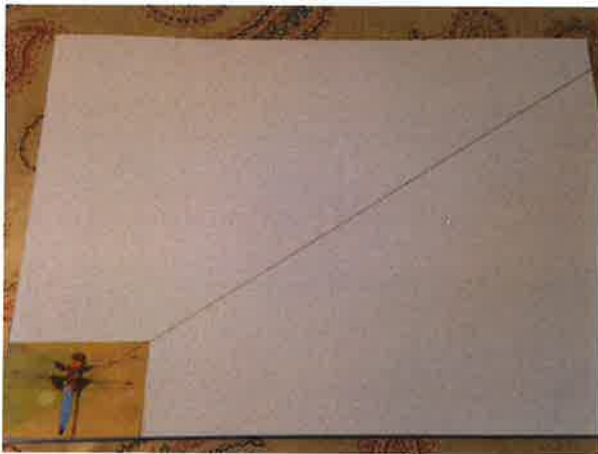
Invertebrates



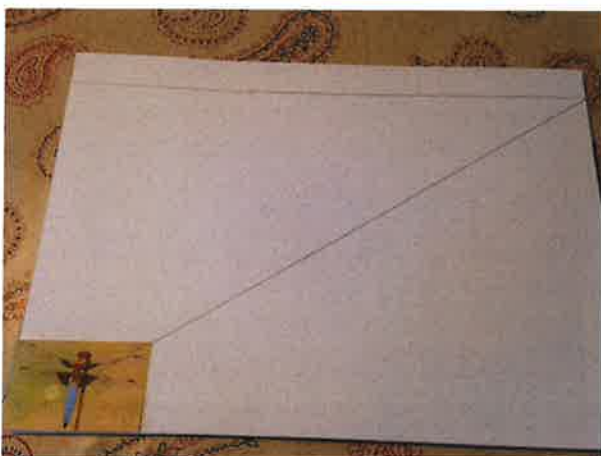
How to expand an image.



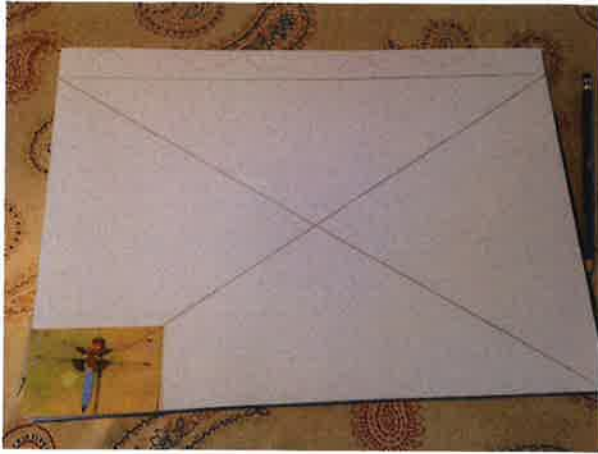
1. Choose a close-up image of an insect. Draw 4 straight lines – diagonally corner to corner, vertically through the centre point and horizontally through the centre point.



2. Place the image in the corner of a large piece of drawing paper (the bigger the better). Using a large ruler, continue the diagonal line until you come to the edge of the large paper.



3. As shown, draw a line from the end of the diagonal line across the paper to create a new edge.



4. Faintly draw the other lines on the large sheet.



5. Cut along all of the lines to create 8 triangles. Mark them on the back to indicate their position. Give each triangle to a different child. They will need to coordinate with the other children who have the surrounding triangles to make sure they cross the joins at the same place. Chn carefully draw the details of the insect within their triangle.



6. Encourage chn to choose how to colour the details in. Join the triangles and display the large insect.



7. Alternatively, chn can work independently to create their own large scale image. They should follow steps 1-4, then draw the details of each triangle independently.

