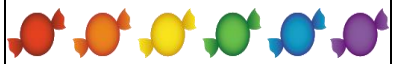
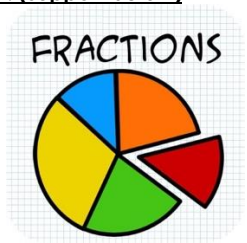
Year 3 Maths – Summer 2 week beginning 15.6.2020

Theme	Fractions Lesson 21 (out of 25) Sharing more than One	Fractions Lesson 22 (out of 25) Sharing more than One	Fractions Lesson 23 (out of 25) Solving word problems	Fractions Lesson 24 (out of 25) Solving word problems	Fractions Lesson 25 (out of 25) Consolidation and Review
Factual fluency (to aid fluency)	Times tables practice (10 questions)	Add fractions activity (10 questions)	Add fractions with like denominators using number lines (10 questions)	Subtract fractions activity (10 questions)	Subtract fractions with like denominators using number lines (10 questions)
Problem/ activity of the day **Remember, just like in class, you can still show the depth of your knowledge** LINK	**(Lesson 1 resources below)** **MAKING LINKS:** Last week, you learnt to share one pack of mints between 2 people. Today, we will build on this learning to share more than one. **THINK: (support below)** Sam and Hannah drew pictures to show $\frac{2}{3}$ of a circle. Who is correct?  Our problem is on textbook page 181. Look at it now. **SEE: (model below)** Our problem and the solution is shown on pages 181-182 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: Questions 1-3 from textbook page 182. Check your answers below before moving on to: Part 2: Workbook, Chapter 11, Worksheet 25, Page 121.	**(Lesson 2 resources below)** **MAKING LINKS:** Yesterday, you learnt to share more than 1. Today, we will continue to build on this learning. **THINK: (support below)** 4 children share 3 pies equally. How much pie does each child get?  Our problem is on textbook page 183. Look at it now. **SEE: (model below)** Our problem and the solution is shown on pages 183-184 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: Questions a, b and c from textbook page 184, and questions 1, 2 and 3 from textbook page 186. Check your answers below before moving on to: Part 2: Workbook, Chapter 11, Worksheets 26 and 27, Pages 122-123.	**(Lesson 3 resources below)** **MAKING LINKS:** Yesterday, you continued to learn to share more than 1. Today, we will solve word problems involving fractions. **THINK: (support below)** Can you help me with this problem? Elliot and Amira both share a pizza.  Elliot takes  Amira takes  How much pizza did Elliot and Amira eat **altogether?** Who ate more? How much more? Our problem is on textbook page 187-188. Look at it now. **SEE: (model below)** Our problem and the solution is shown on pages 187 and 188 in your textbook. Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: questions from textbook page 188. Draw a bar model to help you. Check your answers before moving onto: Part 2: Workbook, Chapter 11, Worksheet 28, Page 124-125	**(Lesson 4 resources below)** **MAKING LINKS:** Yesterday, you were solving problems using addition and subtraction. Today, we will continue to learn to solve word problems involving fractions. **THINK: (support below)** Can you help me with this problem?  Emma took **6** sweets. Elliot took **twice** as many sweets as Emma. Lulu took **half** as many sweets as Emma. How many sweets did they take altogether? Our problem is on textbook page 189. Look at it now. **SEE: (model below)** Our problem and the solution is shown on pages 189 and 190 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: questions from textbook page 190. Draw a bar model to help you. Check your answers before moving onto: Part 2: Workbook, Chapter 11, Worksheet 29, Page 126-127	**(Lesson 5 resources below)** **MAKING LINKS:** For the last two days, you have been applying your fractions knowledge to word problems. **THINK: (support below)**  Think back to all the work we have been doing on fractions. Have a look at the checklist below. Tick off what you know how to do. For those that you have not ticked off, go back to the lessons have watch the videos again. **SEE: (model below)** Watch the lesson video here. **DO:** Use what you have learnt to do the Review 11, pages 130-134 of your workbook. Finished? Have a go at the Mind Workout on page 129 of your workbook.
Methods, tips, clues & checks	**Day 1 resources and answers below**	**Day 2 resources and answers below**	**Day 3 resources and answers below**	**Day 4 resources and answers below**	**Day 5 resources and answers below**

See below for resources to support you to THINK-SEE-DO

DAY 1 RESOURCES:

THINK:

Look at page 181 of your textbook now. Be sure to read all of the information as many times as you need to understand.

Sam and Hannah drew pictures to show $\frac{2}{3}$ of a circle.

Who is correct?

Create your own pictures like Sam and Hannah's pictures to help you. Cutting the circles out to compare the shaded parts might be helpful.

DO

Part 1:

Complete questions 1, 2 and 3 on page 182 of your textbook.

Use pieces of paper to cut out circles to represent the pies or pizzas and use them to help you share.

Check your answers below.

Part 2:

Now complete page 121 of your workbook.
Draw a picture to help you with questions c and d.

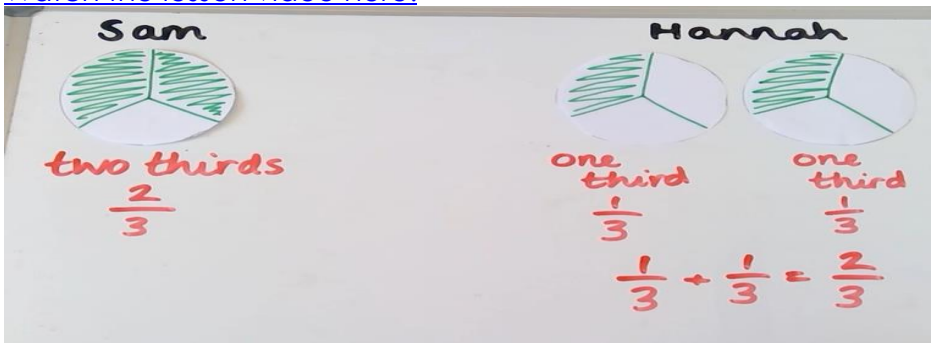
Deepening:

8 children share 3 chocolate bars equally. Find the fraction of chocolate that each child will get.
Explain your answer using a bar model, a written explanation and a division calculation.

SEE:

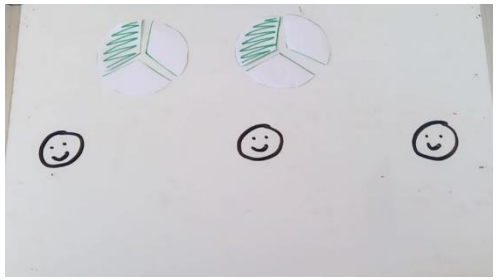
Check the solution on pages 181-182 of your textbook.

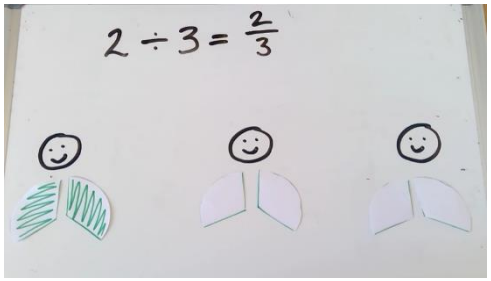
Watch the lesson video here.



Sam drew a whole circle and split it into three equal parts (thirds). He shaded two of them, so he shaded two thirds ($\frac{2}{3}$). Sam was correct.

Hannah drew two whole circles. She split each one into three equal parts (thirds). She shaded one of the thirds on one circle and one of the thirds on the other circle. When she added them together, she found that she had shaded two thirds ($\frac{2}{3}$). Hannah was also correct.





2 ÷ 3 = $\frac{2}{3}$

Next, I wanted to share 2 pies between 3 children. If I gave one whole pie to one child, and the other whole pie to another child, the third child wouldn't get any pie. Instead, I cut each pie into three equal parts (thirds) so that each child could get a piece of each pie.

Now I could share the thirds between the three children. They each got two of the thirds.

2 whole pies shared between 3 children = $\frac{2}{3}$ of a pie

Each child got $\frac{2}{3}$ of a pie.

DAY 2 RESOURCES:

Quality First Education Trust

THINK:
Look at page 183 of your textbook now. Be sure to read all of the information as many times as you need to understand.

4 children share 3 pies equally.
How much pie does each child get?

Cut circles out of paper to represent the pies. Use these to help you solve the problem by sharing.

DO:

Part 1:
Complete questions a, b and c on page 184 of your textbook.
Complete questions 1, 2 and 3 on page 186 of your textbook.

Use circles cut out of paper to represent the cupcakes, pizzas and pies on page 186.

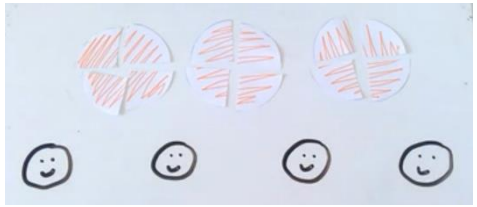
Check your answers below.

Part 2:
Now complete pages 122 and 123 of your workbook.

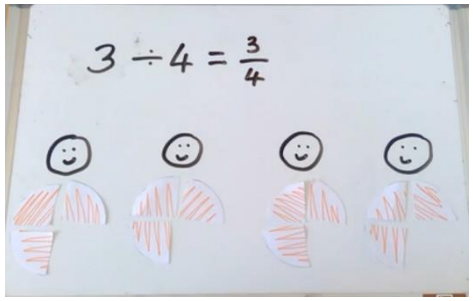
Deepening:
Write and draw to show how you could solve 7 ÷ 4.

SEE:
Check the solution on pages 183-184 of your textbook.
Watch the lesson video here.

I can't simply share the three whole pies between the four children. One of the children wouldn't get any pie which wouldn't be fair.

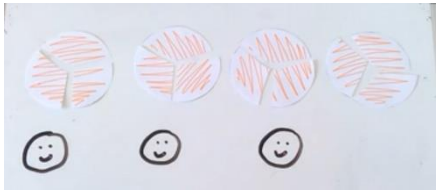


There are four children, so I cut each of the pies into four equal parts (quarters). Now I can share the quarters between the four children.

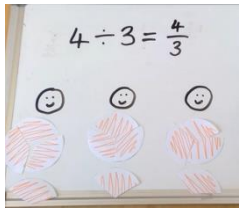


When I shared the quarters between the four children, they each got three of the quarters.
3 whole pies shared between 4 children = $\frac{3}{4}$ of a pie.
Each child gets $\frac{3}{4}$ of a pie.

I tried a new problem next. I tried to share 4 pies between 3 children.



Because there were three children, I cut each pie into three equal pieces (thirds). Now I can share the pies between the 3 children.



When I shared the thirds, each child got four of them.
4 whole pies shared between 3 children = $\frac{4}{3}$ of a pie.
I could also say that each child got **one whole pie and one third** (1 $\frac{1}{3}$) because three of the thirds make up one whole pie.

DAY 3 RESOURCES:

THINK:

Look at page 187 of your textbook now. Be sure to read all of the information as many times as you need to understand.

Elliot and Amira both share a pizza.

Elliot takes 

Amira takes 

How much pizza did Elliot and Amira eat **altogether?**
Who ate more? How much more?

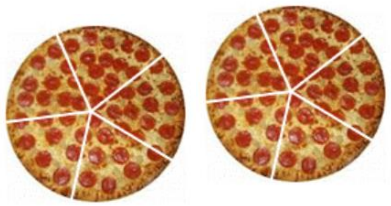
DO:

Part 1: Answer the question from textbook page 188. Draw a bar model to help you.

Check your answers before moving onto:
Part 2: Workbook, Chapter 11, Worksheet 28, Page 124-125

Deepening

If Elliott and Amira doubled the amount of pizza they ate in our think task, how many pizzas would they need to begin with and what fraction of the pizza will they have eaten?



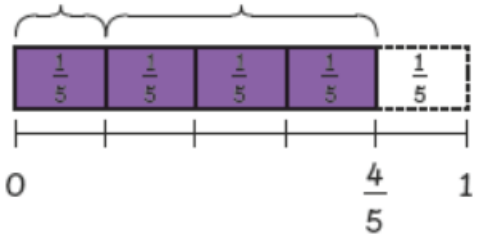
SEE:

Check the solution on pages 187-188 of your textbook.
Watch the lesson video here.

 1 fifth $\frac{1}{5}$

 3 fifths $\frac{3}{5}$

Elliot Amira



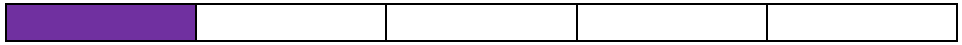
I know $\frac{5}{5}$ = 1 whole

$\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$ 1 fifth + 3 fifths = 4 fifths

They ate $\frac{4}{5}$ of a pizza altogether.

Amira:

Elliott:



Amira ate more than Elliott.

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

Amira ate $\frac{2}{5}$ more of the pizza than Elliott ate.

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DAY 4 RESOURCES:

THINK:

Look at page 189 of your textbook now. Be sure to read all of the information as many times as you need to understand

Emma took **6** sweets. 

Elliot took **twice** as many sweets as Emma.

Lulu took **half** as many sweets as Emma.

How many sweets did they take altogether?

DO:

Part 1: questions from textbook page 190. Draw a bar model to help you.

Check your answers before moving onto:

Part 2: Workbook, Chapter 11, Worksheet 29, Page 126-127

Deepening

Elliot spent $\frac{1}{3}$ of the month drawing.

After that, he spent the rest of the month painting his drawing.

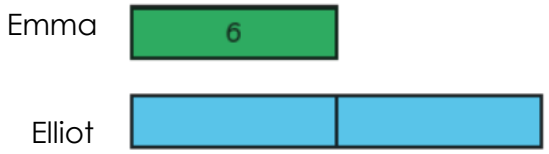
He took 30 days to complete the drawing and painting.

How many days is $\frac{1}{3}$ of 30 days?

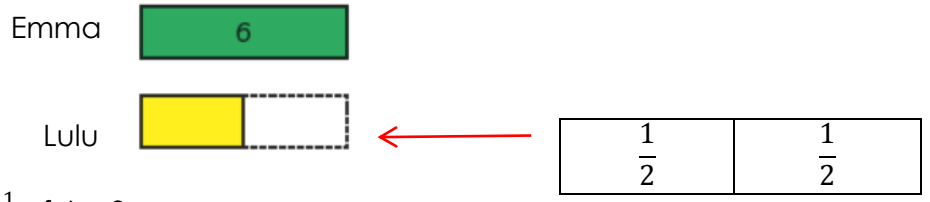
April						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

SEE:

Check the solution on pages 189-190 of your textbook.
Watch the lesson video here.



2 x 6 = 12
Elliot took **12** sweets



$\frac{1}{2}$ of 6 = 3
Lulu took **3** sweets

	number of sweets
Emma	6
Elliot	12
Lulu	3

6 + 12 + 3 = 21
They took **21** sweets altogether.

DAY 5 RESOURCES:

THINK:
Think back to all the work we have been doing on fractions in the last few weeks.
Have a look at the checklist below. Think about what each of these statements mean.

I know how to...	✓
• Count in tenths	
• Make number pairs that form one whole	
• Add and subtract two fractions	
• Find and list equivalent fractions	
• Write a fraction in its simplest form	
• Compare fractions	
• Find part of a set and fraction of a number	
• Share a number equally	
• Write a fraction on a number line	
• Write fractions that are greater than 1	
• Solve word problems involving fractions	

DO:

Using what you have revised, have a go at **Review 11 on pages 130-134** of your workbook.

Deepening:
Finished? Have a go at the Mind Workout on page 129 of your workbook.

SEE:
Watch the lesson video here.

For each statement, can you explain how you do it to an adult at home? Can you draw a diagram to show the depth of your understanding? If you can then tick off the statement from the checklist.

If you are not sure what it means, have a look back at the lessons from the Q1E website to revisit the learning. Check below, or watch the video, if you need help finding which lesson to revise.

Count in tenths – Textbook Lesson 1, pages 116-119 (Summer 1, Week 4)
Make number pairs that form one whole – Textbook Lesson 2, pages 120-121 (Summer 1, Week 4)
Add and subtract two fractions – Textbook Lessons 3, 4, 5, pages 122 – 127 (Summer 1, Week 4), Textbook Lesson 18 , page 163 – 165 (Summer 2, Week 1), Textbook Lesson 19, pages 166-167 (Summer 2, Week 2)
Find and list equivalent fractions – Textbook Lessons 6, 7, 8, 9, 10, pages 128 – 142 (Summer 1, Week 5) and Textbook Lesson 11, page 143 (Summer 2, Week 1)
Write a fraction in its simplest form – Textbook Lesson 12, pages 144-146 (Summer 2, Week 1)
Compare fractions – Textbook Lessons 13 and 14, pages 147 - 153 (Summer 2, Week 1)
Finding part of a set and fractions of a number – Textbook Lessons 21, 22 and 23, pages 171 - 178 (Summer 1, Week 2)
Share a number equally – Textbook Lesson 24, pages 179-180 (Summer 2, Week 2), Textbook Lessons 25, 26, 27, pages 181 - 186 (Summer 2, Week 3)
Write fractions on a number line – Textbook Lesson 1, pages 116-119 (Summer 1, Week 4)
Write fractions that are greater than 1 – examples in Textbook Lesson 27, pages 185 - 186 (Summer 2, Week 3)
Solve word problems involving fractions – Textbook Lessons 28 and 29, pages 187 - 190 (Summer 2, Week 3)

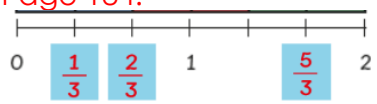
ANSWERS – part 1:

Day 1

1. 3 pies
2. $\frac{3}{4}$ of a pizza
3. $\frac{4}{5}$

Day 2

Page 184:



Page 186:

1. 3 cupcakes
2. $\frac{4}{5}$ of a pizza
3. $\frac{7}{4}$ pies

Day 3

The boy gave me $\frac{1}{10}$ of the cake and the girl gave me $\frac{4}{10}$ of the cake.

Altogether that makes $\frac{5}{10}$ which in its simplest form is $\frac{1}{2}$.

Together, the boy and girl gave me $\frac{1}{2}$ of the cake.

Day 4

1. 5
2. a) 20

   b) 30
3. a) 4

   b) £8

Day 5

Questions 1 to 6

1) $\frac{3}{10}, \frac{9}{10}$
2) $\frac{7}{10}$

   $\frac{5}{10}, \frac{9}{10}$

   $\frac{6}{11}, \frac{1}{11},$
3) $\frac{5}{9}, \frac{4}{7}, \frac{7}{10}, \frac{6}{11}$
4) $\frac{1}{2}, \frac{1}{6}, \frac{1}{2}, \frac{2}{3}$
5) $\frac{1}{5}, \frac{5}{9}, \frac{3}{10}, \frac{6}{12}$
6) $\frac{4}{5}, \frac{1}{3}, \frac{1}{4}, \frac{2}{5}$

ANSWERS – part 2 and deepening:

Day 1

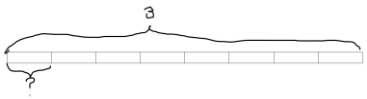
1. $3 \div 4 = \frac{3}{4}$
   Each girl will get $\frac{3}{4}$ of a pizza.

2. $6 \div 7 = \frac{6}{7}$
   Each boy will get $\frac{6}{7}$ of a cake.

3. $4 \div 9 = \frac{4}{9}$

4. $6 \div 11 = \frac{6}{11}$

Deepening:



$3 \div 8 = \frac{3}{8}$
To share the 3 chocolate bars equally between the 8 children, we can split each chocolate bar into eighths (8 equal parts). Each child can take one of the eighths from each chocolate bar. Because there are three chocolate bars, they will each get three eighths ($\frac{3}{8}$)

Day 2

Page 122:

1a) 0, $\frac{1}{3}$, $\frac{2}{3}$, 1

1b) 0, $\frac{1}{3}$, $\frac{2}{3}$, 1, $\frac{4}{3}$, $\frac{5}{3}$, 2

1c) 0, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{4}{5}$, 1

1d) 0, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{4}{5}$, 1, $\frac{6}{5}$, $\frac{7}{5}$, $\frac{8}{5}$, $\frac{9}{5}$, 2

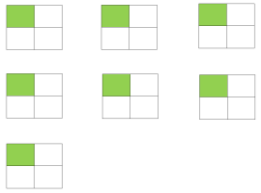
2.

Page 123:

1a) $5 \div 4 = \frac{5}{4}$
Each girl will get $\frac{5}{4}$ of a pizza.
$\frac{5}{4}$ is 5 quarters.

1b) $8 \div 3 = \frac{8}{3}$
Each boy will get $\frac{8}{3}$ of a cake.
$\frac{8}{3}$ is 8 thirds.

Deepening:
$7 \div 4 = \frac{7}{4}$



To divide 7 by 4, I started with 7 whole squares and split each one into 4 equal parts (quarters). If I take one quarter from each of the 7 whole squares, I will have seven quarters ($\frac{7}{4}$)

Day 3

1. $\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$

The boys ate $\frac{4}{5}$ of the pie.

2. $\frac{1}{4}$ of 20 = 5

Holly gave Lulu 5 cupcakes.

3a.
Amira
Ruby

Amira
ate more pizza.

3b. $\frac{4}{7} - \frac{2}{7} = \frac{2}{7}$

3. $\frac{5}{6}$ of 18 = 15
Lulu gave her sister 15 doughnuts.

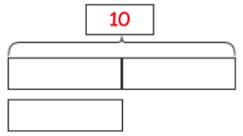
Deepening:
If Elliot and Amira doubled the amount of pizza there would be 10 slices (5 x 2 = 10).

So to begin with, Elliot would have $\frac{2}{10}$ and Amira would have $\frac{6}{10}$.

Altogether they would have $\frac{8}{10}$, which in its simplest form is $\frac{4}{5}$.

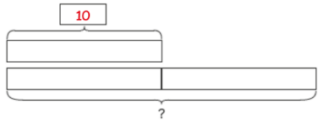
Day 4

1.



Emma
Holly

Holly -> $\frac{1}{2}$ of 10 = 5



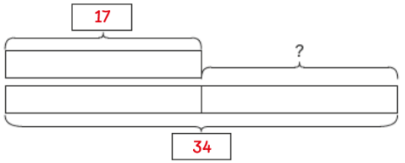
Emma
Elliot

Elliot -> 10 x 2 = 20

Total -> 20 + 10 + 5 = 35

They bought 35 marbles altogether.

2.
Charlie's mother



Ravi's mother

$\frac{1}{2}$ of 34 = 17

Ravi's mother bought 17 more apples than Charlie's mother bought.

3.
Lulu -> $\frac{1}{2}$ of 30 = 15
Total -> 15 + 30 = 45

They had 45 20p coins altogether.
Deepening:
$\frac{1}{3}$ of 30 = 10
Elliot spent 10 days painting.

Day 5

Questions 7 to 10 and deepening

7) =, >, <, >

8) 7, 8, $\frac{2}{3}$, $\frac{5}{11}$

9) $\frac{3}{4}$ of 32 = 24

Amira gave 24 muffins away.

10)
Sam $\frac{1}{2}$ of 50 = 25

50 + 25 = 75

They had 75 book marks altogether

Deepening:

$\frac{5}{24}$ because 24-5 = 19 and it is

greater than $\frac{1}{8}$ which is = $\frac{3}{24}$

and less than $\frac{1}{4}$ which is = $\frac{8}{24}$