Year 4 Maths 20.05.20
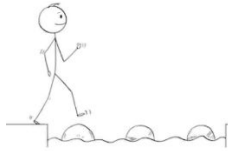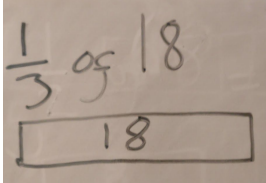Steppingstone activity
LO: To find a fraction of a quantity
Success Criteria:

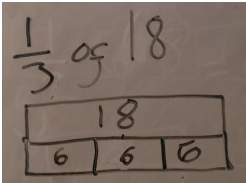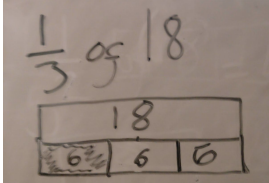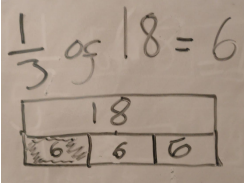| 1. Make a bar model of your fraction |
| 2. DIvide the model/whole number by the denominator |
| 3. Multiply by the numerator (Shade the model) |
| 4. Write your answer |

$\frac{3}{4}$

Numerator
How many equal parts do you have?

Denominator
How many equal parts is the whole divided into?

==Model==

1. $\frac{1}{3}$ of 18
   | 18 |

2. $\frac{1}{3}$ of 18
   | 18 |
   | 6 | 6 | 6 |

3. $\frac{1}{3}$ of 18
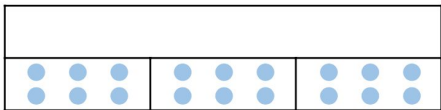 | 18 |
   | 6 | 6 | 6 |

4. $\frac{1}{3}$ of 18 = 6
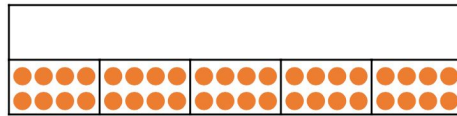 | 18 |
   | 6 | 6 | 6 |

Now you try... Make equivalent fraction of the one below

1a. Rosie is finding fractions of an amount. She knows that $\frac{1}{3}$ of her number is 6.
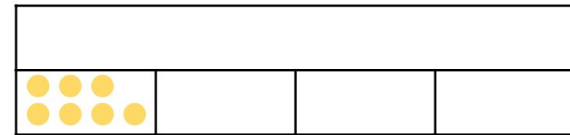
Use the bar model to find the whole.

1b. Jake is finding fractions of an amount. He knows that $\frac{1}{5}$ of her number is 8.

Use the bar model to find the whole.
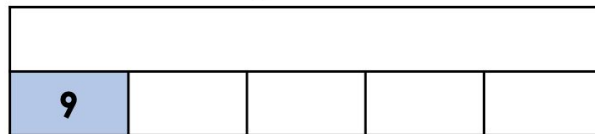
2a. $\frac{1}{4}$ of a number is 7.

Complete the bar model to find the whole.

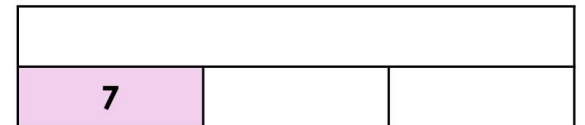2b. $\frac{1}{2}$ of a number is 11.

Complete the bar model to find the whole.

3a. Anna knows $\frac{1}{5}$ of a number is 9.

| 9 | | | | |

$\frac{1}{5}$ of ☐ = ☐

3b. Ellan knows $\frac{1}{3}$ of a number is 7.
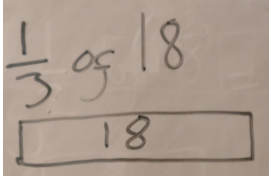
| 7 | | |

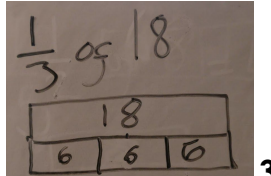$\frac{1}{3}$ of ☐ = ☐

Year 4 Maths

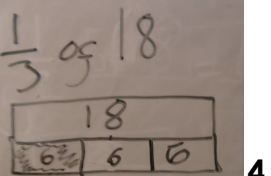**Lesson 20.05.20**

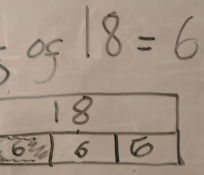**LO: To find a fraction of a quantity**

Success Criteria:

1. Make a bar model of you fraction
2. DIvide the model/whole number by the denominator
3. Multiply by the numerator (Shade the model)
4. Write your answer

Model:

1. $\frac{1}{3}$ of 18

18

2. $\frac{1}{3}$ of 18

18

| 6 | 6 | 6 |

3. $\frac{1}{3}$ of 18

18

| 6 | 6 | 6 |

4. $\frac{1}{3}$ of 18 = 6

18

| 6 | 6 | 6 |

$\frac{3}{4}$

Numerator
How many equal parts do you have?

Denominator
How many equal parts is the whole divided into?

Year 4 Maths Main activity
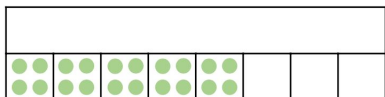Complete at least 2 columns, more if you can!

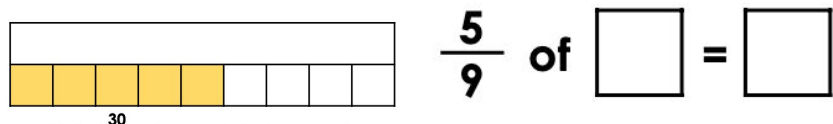| Task 1	Task 2
Practice: Use the bar model to find the whole	**Practice: Use the bar model to find the whole**

Task 1

Practice: Use the bar model to find the whole

Marco is finding fractions of an amount. He knows that 5/8 of his number is 20.

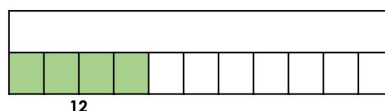Millie is finding fractions of an amount. She knows that 5/12 of his number is 30.

Georgie knows 5/9 of a number is 30.

$\frac{5}{9}$ of $\square$ = $\square$

30

Benny knows 4 of a number is 12.

$\frac{4}{11}$ of $\square$ = $\square$

12

5. 1/4 of 44 = ?

6. 1/10 of 90 = ?

7. 3/5 of 15 = ?

8. 7/10 of 50 = ?

Extension

8a. George has a packet of sweets.

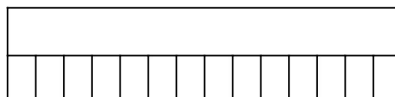He has eaten $\frac{4}{9}$ of the packet.

He has eaten 16 sweets.

How many sweets were in the packet before George started eating them?
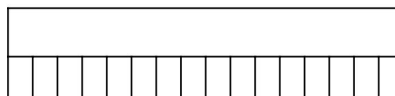
Task 2

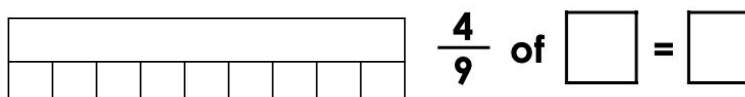**Practice: Use the bar model to find the whole**

Pippa is finding fractions of an amount. She knows that 2/14 of her number is 6.

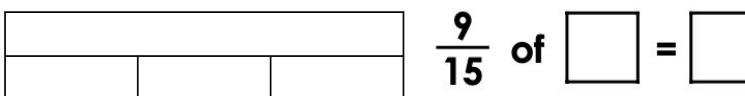Dylan is finding fractions of an amount. He knows that 4/16 of his number is 10.

Philip knows 6/9 of a number is 72.

$\frac{4}{9}$ of $\square$ = $\square$

Alice knows 10/15 of a number is 30.

$\frac{9}{15}$ of $\square$ = $\square$

5. 4/5 of 80 = ?

6. 3/5 of 85 = ?

7. 6/10 of 90 = ?

8. 3/8 of 96 = ?

Extension

12a. Leo and Liz are eating chocolates.

Leo has eaten $\frac{1}{4}$ of the box.

Liz has eaten $\frac{3}{8}$ of the box.

If Leo has eaten 10 chocolates, how many did Liz eat?

How many chocolates were in the box before they were opened?

Task 3

Reasoning

Explain your answers.

4a. Margot completes the following calculation in her book but she has made a mistake.

> If $\dfrac{2}{9}$ is 18, then the whole is 36.

Find the mistake that she has made.

Draw a bar model to prove your answer.

8a. Nathaniel is calculating a whole number from a fraction.

He says,

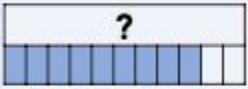> I know $\dfrac{6}{9}$ of a number is 12. To find the whole I can divide by 2 and multiply by 3.

Is he correct? Explain how you know.

Task 4

Problem solving

1. Use the dominoes to create a continuous loop by matching whole numbers to the correct representation or calculation.
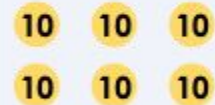
? ... 54	35

$\frac{3}{8}$ of ? = 24	(image of base-ten blocks)

$\frac{6}{8}$ of ? = 54	10 10 10 / 10 10 10 / 10 10 1

? ... 21	48

$\frac{3}{5}$ of ? = 15	10 10 10 / 10 10 10

(fraction circle) = 54	66

$\frac{4}{12}$ of ? = 16	(image of base-ten blocks)

(fraction circle) = 35	10 10 10 / 10 10 10 / 10 1 1