Canonbury Home Learning

Year 4 Maths

Steppingstone activity

LO: To add and subtract fractions

Success Criteria:

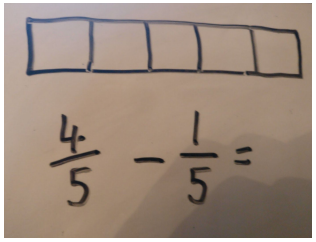
1. Look at your image
2. Count the total sections (This is your denominator)
3. Count the shaded sections (This is your numerator)
4. Subtract (cross out) the sections
5. Write your answer as a fraction

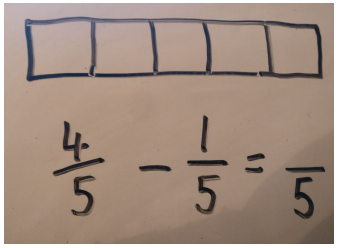
$\frac{3}{4}$

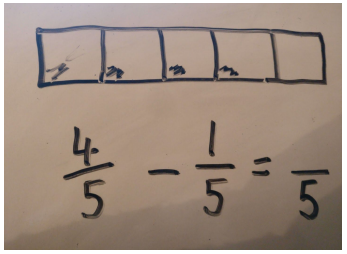
Numerator
How many equal parts do you have?

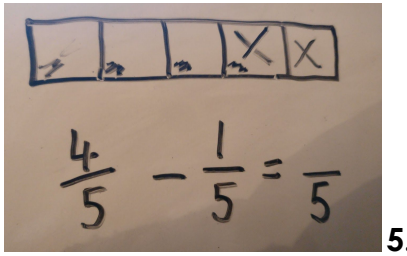
Denominator
How many equal parts is the whole divided into?

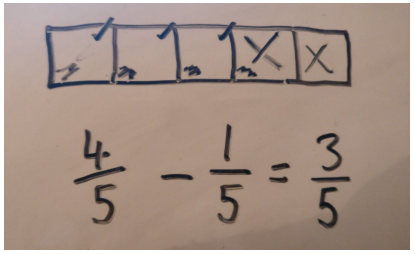
Model

1. 

2. 

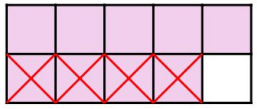
3. 

4. 

5. 

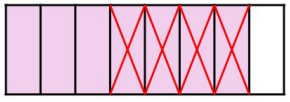
Now you try… Make equivalent fraction of the one below

1. $\frac{9}{10} - \frac{4}{10} = \frac{\square}{\square}$



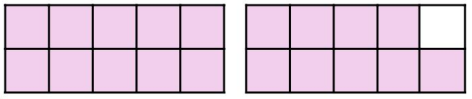
5/10

2. $\frac{7}{8} - \frac{4}{8} = \frac{\square}{\square}$



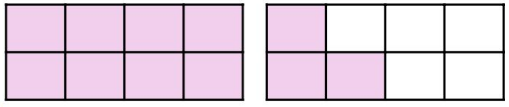
3/8

3. $\frac{19}{10} - \frac{7}{10} = \frac{\square}{\square}$



12/10

4. $\frac{11}{8} - \frac{5}{8} = \frac{\square}{\square}$



6/8

5. **7/8 - 2/8 = 5/8**
6. **8/11 - 4/11 = 4/11**
7. **12/12 - 9/12 = 3/12**

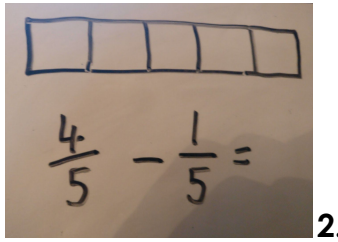
Year 4 Maths

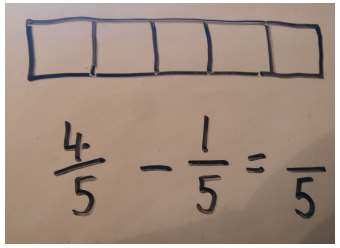
Lesson 17
LO: To find equivalent fractions

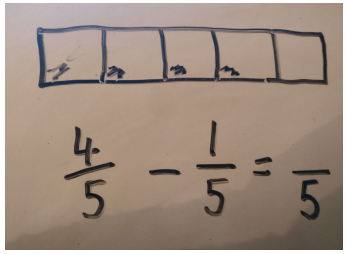
Success Criteria:

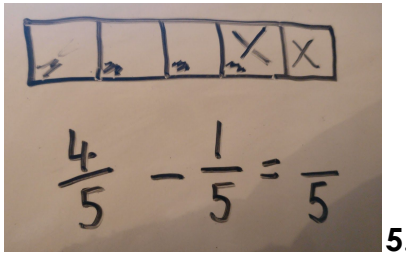
1. Look at your shape
2. Count the total sections (This is your denominator)
3. Count the shaded sections (This is your numerator)
4. Write your fraction
5. Make an equivalent fraction

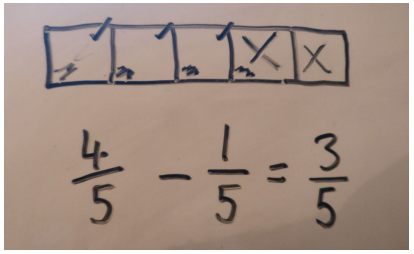
Model:



2. 

3. 

4. 

5. 

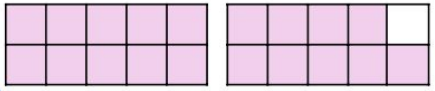
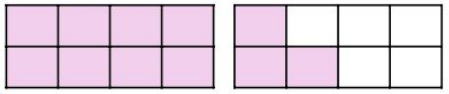
3/4

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: Make the first fraction as an image then subtract the second fraction from it. **1.** $\frac{19}{10} - \frac{7}{10} = \frac{\square}{\square}$  11/10 **2. 14/8 - 2/8 = 12/8** **3. 15/9 - 2/9 = 13/9** **4. 11/8 - 5/8 = 6/8** **5. 17/11 - 8/11 = 9/11** **6. 21/11 - 13/11 = 8/11** **7. 11/6 - 9/6 = 2/6** **8. 13/9 - 11/9 = 2/9**	**Practice: Make the first fraction as an image then subtract the second fraction from it.** **1.** $\frac{11}{8} - \frac{5}{8} = \frac{\square}{\square}$  6/8 **2. 14/20 - 6/10 = 1/10 or 2/20** **3. 7/8 - 4/16 = 5/8 or 10/16** **4. 16/18 - 3/9 = 10/18 or 5/9** **5. 19/20 - 4/10 = 11/20** **6. 14/8 - 3/4 = 8/8 or 1 or 4/4** **7. 20/12 - 10/6 = 0** **8. 15/9 - 20/18 = 10/18 or 5/9**

Task 3

Reasoning

Explain your answers.

4a. Rene walks $\frac{7}{5}$ miles to school.

Rabina walks $\frac{4}{5}$ less than Rene.

Rene

Rabina walks $\frac{2}{5}$ of a mile.

Is she correct? Explain your answer.

4a. Rene is incorrect because $\frac{7}{5} - \frac{4}{5} = \frac{3}{5}$.

7b. Sam's rat weighs $\frac{16}{11}$ of a kilogram.

Lida's rat weighs $\frac{12}{22}$ less than Sam's.

Sam

Lida's rat weighs $\frac{1}{11}$ of a kilogram.

Is he correct? Explain your answer.

7b. Sam is incorrect because $\frac{16}{11} - \frac{12}{22} = \frac{20}{22}$

(also accept simplified answers).

Task 4

Problem solving

2. Play the game with a partner following the rules below.

Dicey Fractions

Aim

To be the first player to reach a number less than one by subtracting fractions created by rolling the dice.

Rules

1. Each player starts with $\frac{48}{12}$.
2. Player One rolls two dice. They select which of the dice they want to be the numerator and the denominator. If 1 is rolled, the dice must be re-rolled.
3. The player subtracts the fraction from their remaining total. The fraction being subtracted may be converted to an equivalent fraction.
4. Play then passes to Player Two who repeats rules 2-4.
5. The winner is the first person to reach a fraction less than one.

Various possible outcomes, for example: $\frac{48}{12} - \frac{6}{3} - \frac{4}{4} - \frac{2}{4} = \frac{1}{2}$

Discuss how your strategy will change if you use dice with different a different number of sides. A dice with more sides would allow for a larger numerator with a smaller denominator so that the game could be won faster.