Summer term week 3 w/b 4th May 2020

https://whiterosemaths.com/homelearning/year-3/

Click on week 2; lesson

Lesson 1 - Fractions on a number line



Lesson 2 - Fractions of a set of objects (1)



Lesson 3 - Fractions of a set of objects (2)



Lesson 4 - Fractions of a set of objects (3)



Lesson 1 activity: fractions on a number line

Draw an arrow to show the fractions on the number lines.





b)
$$\frac{1}{3}$$



c) $\frac{1}{4}$



Are your answers accurate or are they estimates?

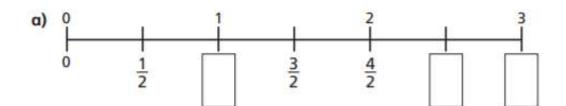
Write <, > or = to compare the fractions.

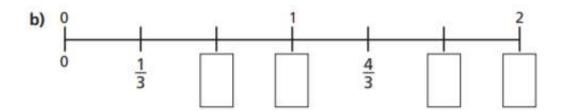
a)
$$\frac{1}{2}$$
 $\frac{1}{4}$

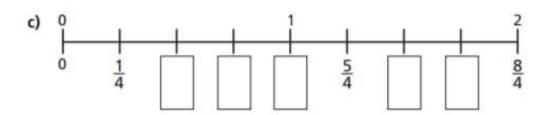
b)
$$\frac{1}{4}$$
 $\frac{1}{3}$

c)
$$\frac{1}{3}$$
 $\frac{1}{2}$

Write the missing fractions on the number lines.







d) Write three fractions that are equivalent to one whole.
Use the number lines to help you.



What do you notice?

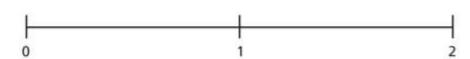
4

Draw an arrow to estimate where each fraction belongs on the number line.

a) $\frac{3}{4}$



b) 1 and $\frac{2}{3}$



Write each fraction under the correct heading.

2 3

4/4

5 3

18

3

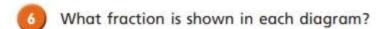
3 4

7/4

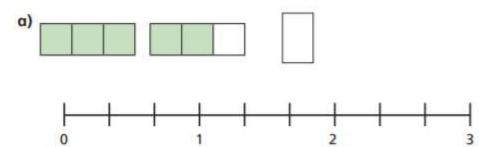
8

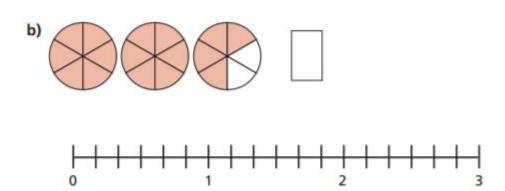
78

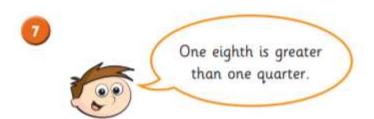
Less than one whole	Equal to one whole	More than one whole



Draw an arrow to show the fraction on the number line.







Do you agree with Teddy? _____

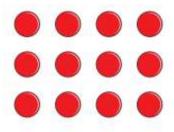
Use the number line to show why.



Lesson 2 activity: fractions of a set of objects

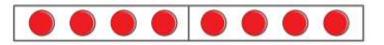


Here are some counters.



- a) Circle $\frac{1}{4}$ of the counters.
- b) How many counters did you circle?
- c) What is $\frac{1}{4}$ of 12?
- 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

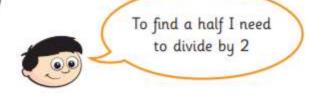


b)
$$\frac{1}{2}$$
 of 16 =

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

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

3



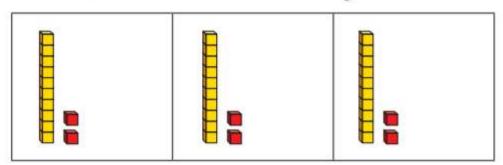
Do you agree with Dexter?

Talk about it with a partner.

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	

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 =

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 =

Which amount is greater? Tick your answer.

$$\frac{1}{3}$$
 of £75 or $\frac{1}{5}$ of £75

Show your workings.

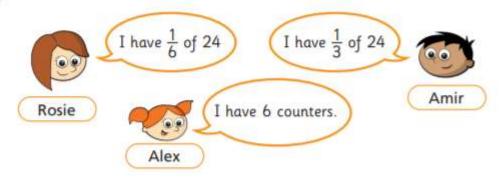
Complete the number sentences.

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

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

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

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

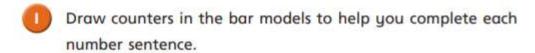


a) Order the children from least counters to most counters.

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

Lesson 3 activity: fractions of a set of objects



a) $\frac{2}{3}$ of 15 =		
3		

b)
$$\frac{3}{4}$$
 of 8 =

c)
$$\frac{2}{5}$$
 of 20 =

Match the questions and answers.

$$\frac{2}{3}$$
 of 9 = ?

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

$$\frac{5}{6}$$
 of 12 = ?

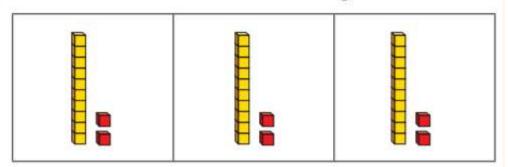
$$\frac{3}{4}$$
 of 20 = ?

What is $\frac{6}{6}$ of 18?



How do you know?

Brett uses a bar model and base 10 to find $\frac{2}{3}$ of 36



Use Brett's method to complete the number sentences.

- a) $\frac{2}{3}$ of 63 =
- **b)** $\frac{3}{4}$ of 48 =
- c) $\frac{3}{4}$ of 92 =

Sim uses a bar model and place value counters to find $\frac{2}{3}$ of 36



Use Kim's method to complete the number sentences.

a)
$$\frac{2}{3}$$
 of 96 =

b)
$$\frac{3}{5}$$
 of 60 =

c)
$$\frac{3}{4}$$
 of 52 =

Complete the number sentences.

a)
$$\frac{2}{3}$$
 of $= 30$

b)
$$\frac{3}{4}$$
 of $= 30$

c)
$$\frac{5}{6}$$
 of $= 30$

7



To find $\frac{3}{4}$ of 12, you divide by 4 and then multiply the answer by 3

Tommy

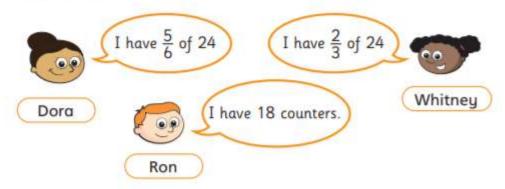
To find $\frac{3}{4}$ of 12, you divide by 3 and then multiply the answer by 4



Who is correct? _____

How do you know? Show your working.

Dora, Whitney and Ron each find a fraction of 24 using counters.



a) Who has the most counters? Show your workings.

- b) How many more counters does Dora have than Whitney?
- Write fractions to make the statements correct.

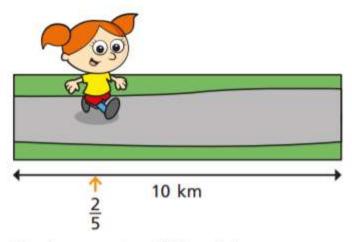
How many different answers can you find for each?

Lesson 4 activity: fractions of a set of objects

In a class of 32 children, three eighths are girls.

How many children are boys?

Alex is taking part in a 10 km race.



She has run two fifths of the race.

What distance does she have left to run?



Filip has £3 and 20p.







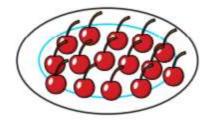


He spends half of his money.

How much does he have left?

£ and p

Teddy opens a bag of cherries and puts $\frac{1}{2}$ on a plate.



How many cherries were there in the whole bag?



Ron has £4 and 50p.

He decides to share the money equally between himself and his two sisters.











How much money will each child get?

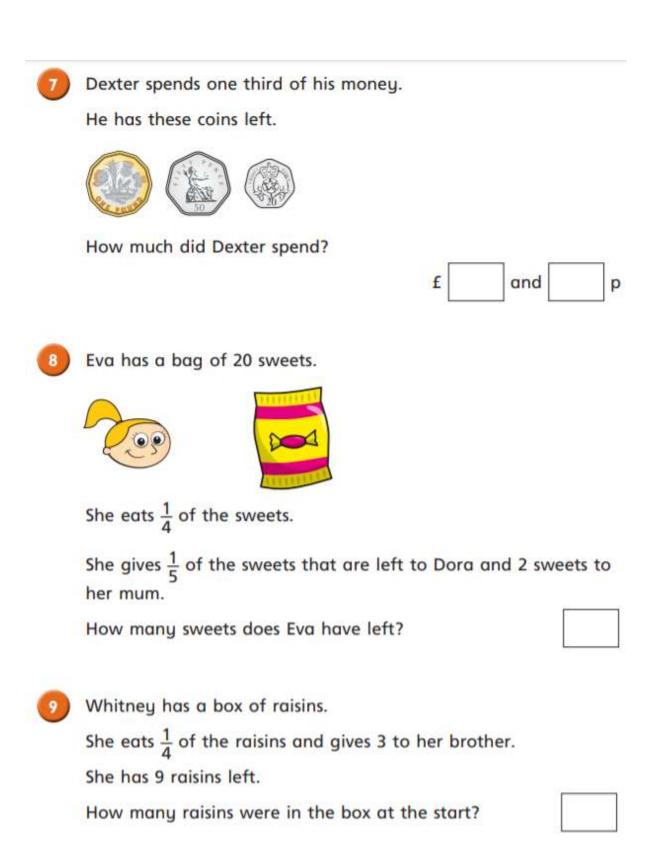
k

A bag of potatoes weighs 500 g.

Annie's dad uses one quarter of the potatoes to make a shepherd's pie.

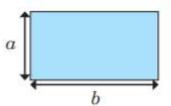


What is the mass of the potatoes left in the bag?



4000				
10	Here	is a	rectang	le.

The perimeter of the rectangle is less than 30 cm.



Side a is one half of the length of side b.

a) Complete the table to show the different possible integer lengths of side a and side b.

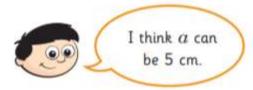
Length of side a	Length of side b	Perimeter
1 cm	2 cm	6 cm

b) What are the longest possible integer lengths of side a and b?

2 *C** C** C**	side a

side b _____





Talk to a partner about why Dexter is wrong.