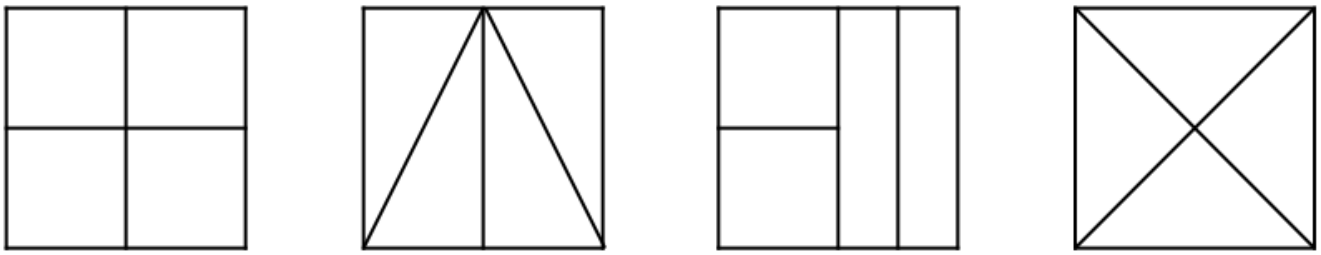
ANSWERS

Lesson 1 Main activity 2:

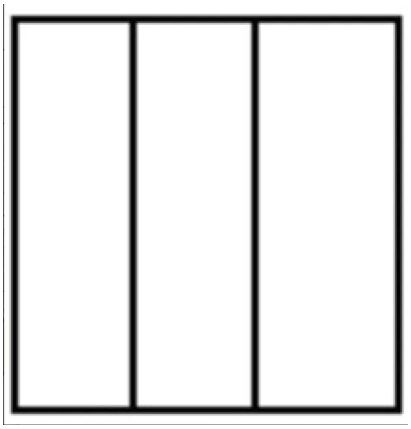
Equal: B, C, E, G, H, I, J, L

Unequal parts: A, D, F, K.

Lesson 1 Main activity 3: Dividing a square into 4 equal parts These



are some examples. There are more, how many did you find?

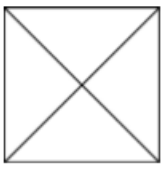


3 parts

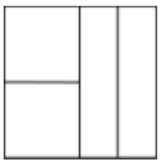
Lesson 2, starter:

Three children are splitting a square into equal parts.

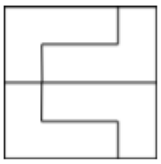
Teddy



Alex



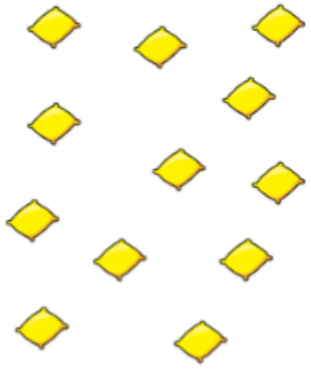
Mo



Who has split the square into equal parts? Explain why.

All children have split the square into equal parts. Children may need to cut out the pieces and manipulate them to prove why.

How many different ways can you put these beanbags into equal groups?



Children can sort the beanbags into groups of 1, 2, 3, 4, 6 and 12

Lesson 2, activity 1:

Sam has just eaten half of the cherries. How many were there in total?

If $\frac{1}{2}$ is 3, to find the total you need to add another 3, 2 halves make the whole, so 3 + 3 = **6**.

Kate collected some leaves on her walk home. Here is a $\frac{1}{4}$ of what she found. How many did she find altogether?

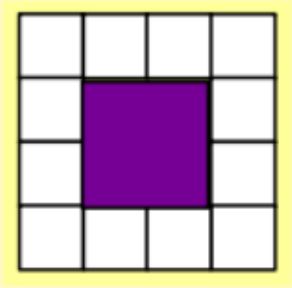
If $\frac{1}{4}$ is 2, to find the total you need to add another 2, this will give you 4. This is half of the leaves. Double that number to find the total— 4 + 4 = **8** 4 quarters make the whole. 2 4 = 8.

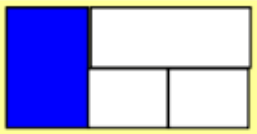
Tom showed his sister $\frac{1}{3}$ of his sticker collection. How many stickers does he have in total?

$\frac{1}{3}$ is 3. There are 3 thirds in a whole. So I need to do 3 x 3 = **9**

Lesson 3, Starter.

Starter: What fraction is shaded of the whole?

1. 

2. 

3. 

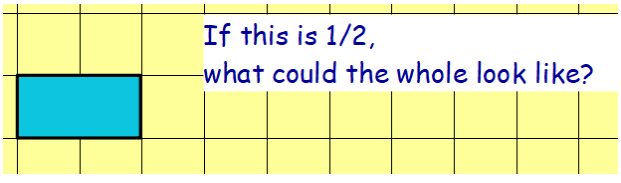
To find a fraction, I have to make all parts equal.

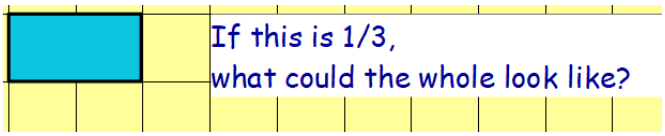
So on 1: I can see that 4 squares must be shaded. There are 16 parts in total. The fraction that is shaded is $\frac{4}{16}$ Some of you might recognise that this is the same as $\frac{1}{4}$

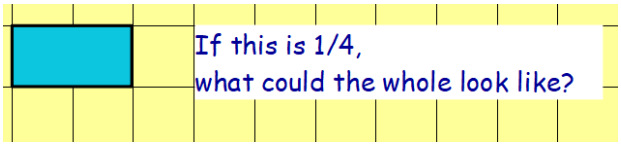
2: I need to make all parts equal. I can see two squares, they are not showing in the other 2 parts (one which is coloured) but there would be 6 to make them equal fractions (which fractions need to be). That means 2 are coloured, out of 6. The fraction that is shaded is $\frac{2}{6}$

Some of you might know that this is the same as $\frac{1}{3}$

3. Each square can be divided into 2 to make them the same as the red triangle. There would be 8 triangles, 1 is coloured so the fraction is $\frac{1}{8}$



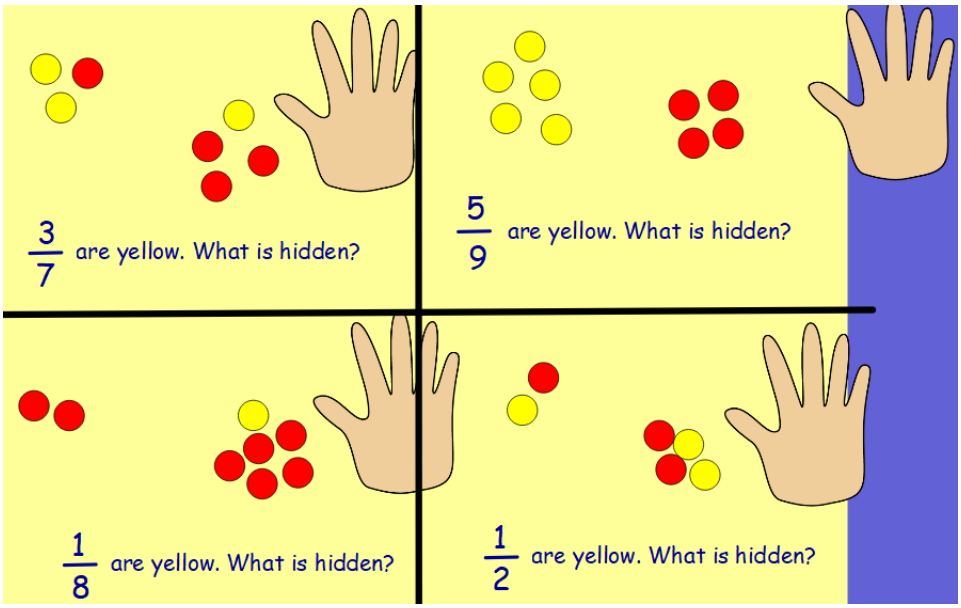




Your pictures may all look different. But the important part is you must have the right amount of square.

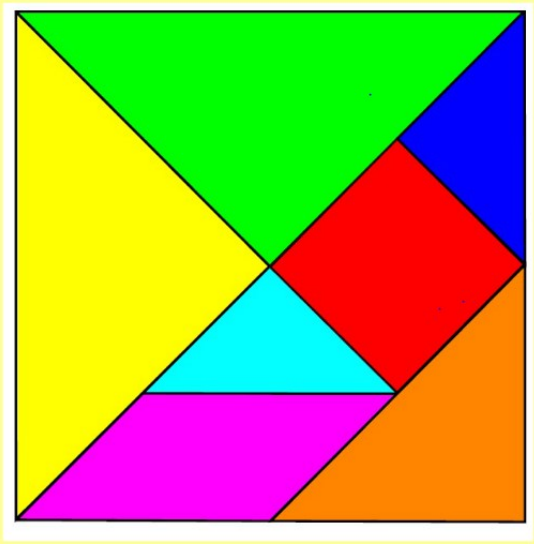
1. If this is half, the whole must have 4 squares.
2. If this is one third, you must have 6 squares.
3. If this is a quarter, you must have 8 squares.

Lesson 3, Activity 2:



Lesson 3, Challenge:

What is the fraction of each shape?



Green = 1/4 or 4/16

Yellow = 1/4 or 4/16

Light blue = 1/16

Dark blue = 1/16

Purple = , 2/16 or 1/8

Orange = 2/16 or 1/8

Red = 2/16 or 1/8

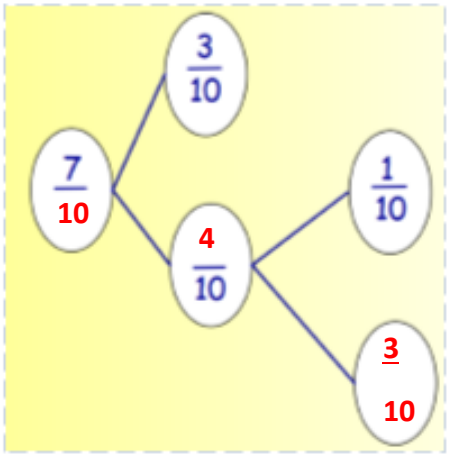
Explanation for parents: There are different ways to start this. You could start by looking at the smallest pieces and finding out how many of them make the whole. The children might need to cut these out to check. This would be a starting place if your child doesn't know where to start. All pieces are then in the same denomination.
I saw that the square could be cut in half showing you the green and yellow triangle. These two pieces are equal so must both be quarters. I then looked at the light blue piece, I can see 4 of these would fit in what would be another quarter of the main square, so the light blue triangle must be 1/16. The dark blue triangle is the same, just in a different orientation. I can see the purple shape is made up of 2 of the blue triangles, so it must be 2/16, or 1/8. This is the same for the orange and red piece. I would then put them all in the same denominations to check they add up to a whole. Some children will do it like this.

This is a hard challenge, it's something we would discuss and play around with in class using resources. Many children will find this hard but enjoy playing around with it, and it really consolidates and builds on their understanding. But don't worry if they can't access it!

Lesson 4, Activity 2

Other options for first part of question 2.
Just check all your parts add up to a whole.

1.



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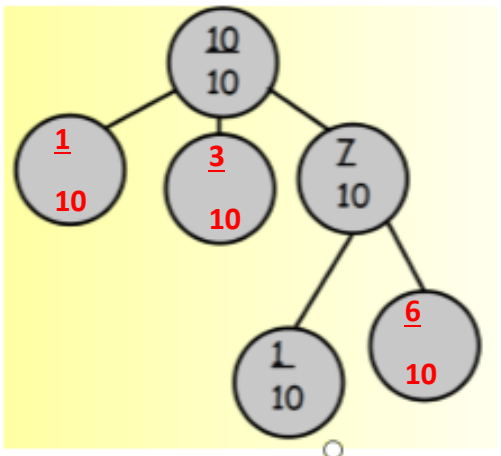

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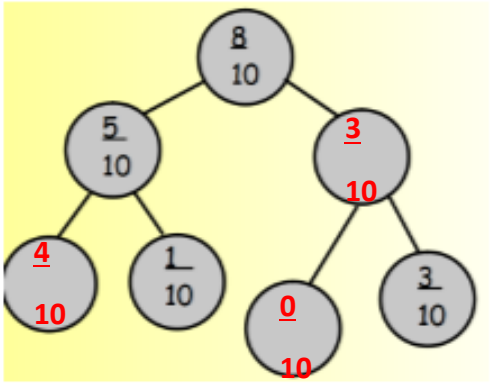

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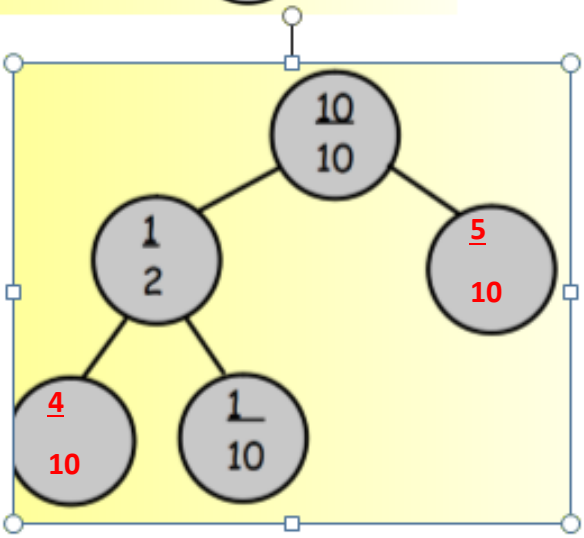

Lesson 5, Starter.

Teddy is counting in tenths.

Seven tenths, eight tenths, nine tenths, ten tenths, one eleventh, two elevenths, three elevenths...

Can you spot his mistake?

Teddy thinks that after ten tenths you start counting in elevenths. He does not realise that ten tenths is the whole, and so the next number in the sequence after ten tenths is eleven tenths or one and one tenth.

True or False?

Five tenths is $\frac{2}{10}$ smaller than 7 tenths.

Five tenths is $\frac{2}{10}$ larger than three tenths.

Do you agree?

Explain why.

This is correct. Children could show it using pictures, ten frames, number lines etc.
For example: