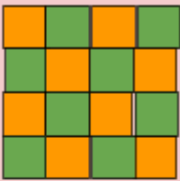



Mathematics**Learning Intention:**

We can recognise and interpret common uses of halves, quarters and eighths of shapes.

**Warm Up:**

 <p>Divided by 2</p>	<p>19 - 11</p>
 <p>5 times</p>	<p>Half of 16</p>

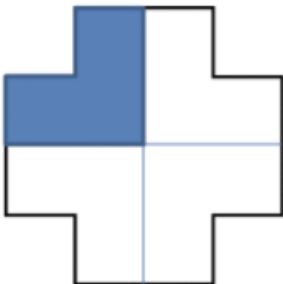
Which one does not belong ?

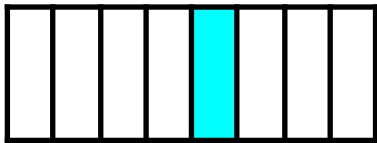
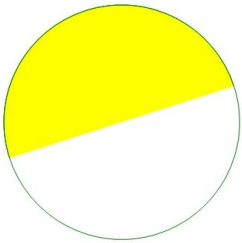
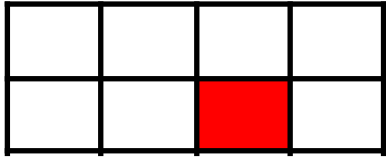
How do you know ?

Square	Number Sentence
PINK	
PURPLE	
YELLOW	
BLUE	

**Task:****How much is coloured?**

- Decide whether each shape shows either  $\frac{1}{2}$ ,  $\frac{1}{4}$  or  $\frac{1}{8}$  coloured . Record your reason why under the matching heading. The first one has been done for you.
- In the last two rows draw 2 of your own shapes that match the reasoning.

Shape	One half Or $\frac{1}{2}$	One quarter Or $\frac{1}{4}$	One eighth Or $\frac{1}{8}$
		<p>It is <math>\frac{1}{4}</math> because there is <b>1 piece</b> coloured <b>blue</b> out of <b>4 equal pieces</b>.</p>	



?

It is  $\frac{1}{2}$  because there is **1 piece** coloured **green** out of **2 equal pieces**.

?			It is $\frac{1}{8}$ because there is <b>1 piece</b> coloured <b>black</b> out of <b>8 equal pieces</b> .
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**If you need some help to get started:**

- If **1 whole** is cut into **two equal pieces** then each piece is called **one half** and this is written as  $\frac{1}{2}$  .
- If **halves** are cut into **two equal pieces** then there are now **4 equal pieces** and each piece is called **one quarter**. This is written as  $\frac{1}{4}$  .
- If one quarter is cut into half then there are now **8 equal pieces** and each piece is called **one eighth**. This is written as  $\frac{1}{8}$ .

**For the children who would like an extra challenge:**

- What would it look like if a shape that was cut in eighths was then cut in half again? Can you draw a picture? What would each piece be called?
- Samuel said 8 is a larger number than 4 so eighths should be larger pieces than quarters. Do you agree with Samuel's reasoning? Why /Why not?