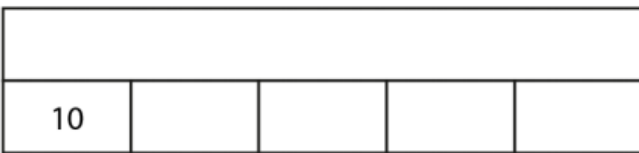
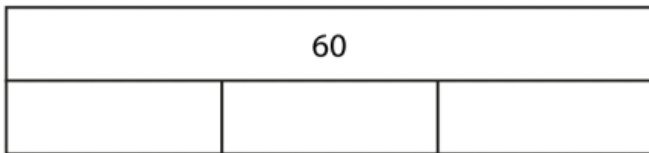
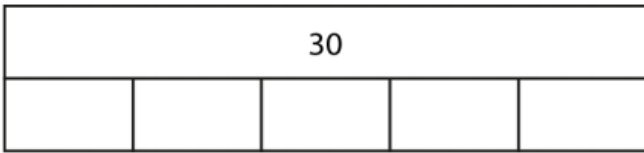
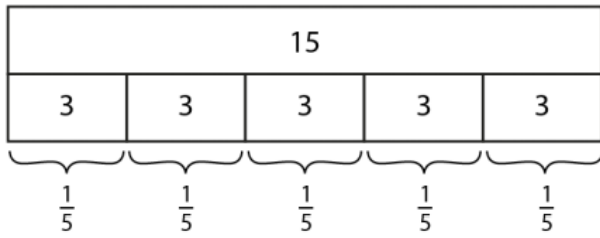


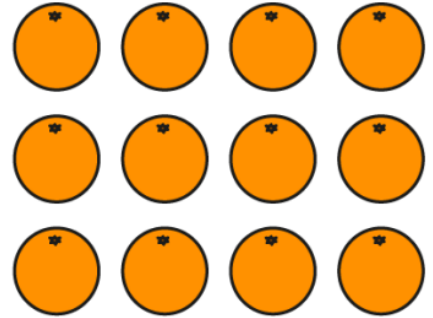


23.05.2022

Multiplying fractions & whole numbers (bar model)



'Circle three-quarters of the oranges.'



$$\frac{1}{\square} \text{ of } \square = 10$$

$$\frac{1}{2} \text{ of } \square = 10$$

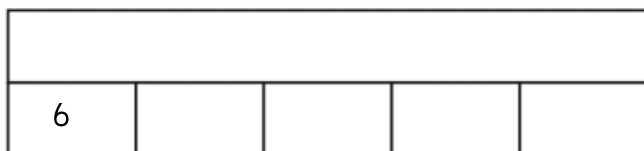
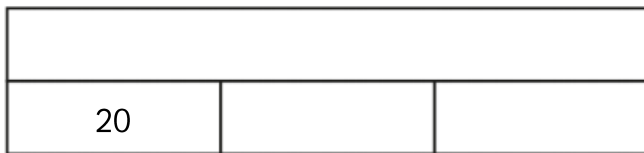
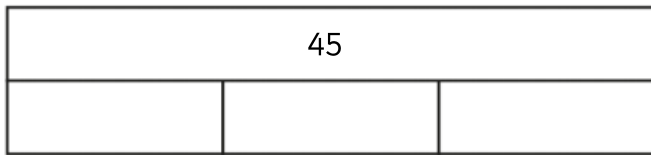
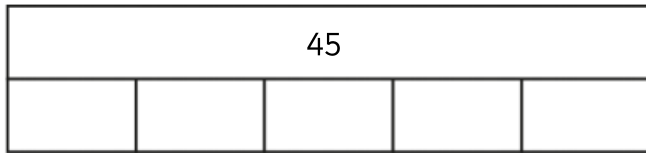
$$\frac{1}{3} \text{ of } \square = 10$$

$$\frac{1}{4} \text{ of } \square = 10$$



23.05.2022

Multiplying fractions & whole numbers (bar model) (sheet 2)



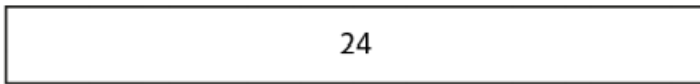


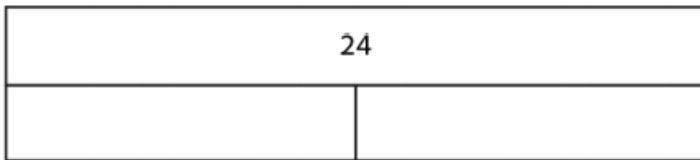
23.05.2022

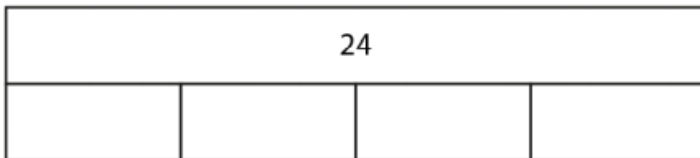
Multiplying fractions & whole numbers (bar model) - Challenge

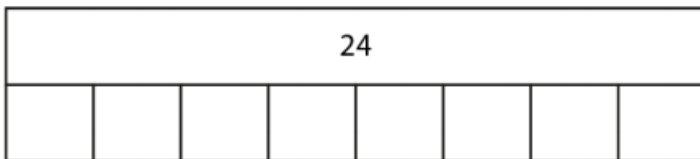
Complete the missing parts of the bar models and then describe the relationships between the solutions to the following calculations:

1 of 24 $\frac{1}{2}$ of 24 $\frac{1}{4}$ of 24 $\frac{1}{8}$ of 24









Whitney has calculated $4 \times \frac{3}{14}$



From the picture I can see that $4 \times \frac{3}{14} = \frac{12}{14}$



Do you agree? Explain why:

Always, sometimes, never?

When you multiply a unit fraction by the same number as it's denominator the answer will be one whole.



24.05.2022

Finding a fraction of a whole number

Journal the answers to one of the sets of questions below:



$$\frac{1}{4} \text{ of } 20$$

$$\frac{1}{5} \text{ of } 35$$

$$\frac{1}{6} \text{ of } 36$$

$$\frac{1}{10} \text{ of } 200$$



$$\frac{3}{4} \text{ of } 40$$

$$\frac{2}{9} \text{ of } 18$$

$$\frac{7}{8} \text{ of } 56$$

$$\frac{4}{9} \text{ of } 27$$



$$\frac{7}{8} \text{ of } 1600$$

$$\frac{4}{9} \text{ of } 20$$

$$\frac{8}{9} \text{ of } 360$$

$$\frac{7}{10} \text{ of } 2000$$



24.05.2022

Finding a fraction of a whole number

Journal the answers to one of the sets of questions below:



$$\frac{1}{4} \text{ of } 20$$

$$\frac{1}{5} \text{ of } 35$$

$$\frac{1}{6} \text{ of } 36$$

$$\frac{1}{10} \text{ of } 200$$



$$\frac{3}{4} \text{ of } 40$$

$$\frac{2}{9} \text{ of } 18$$

$$\frac{7}{8} \text{ of } 56$$

$$\frac{4}{9} \text{ of } 27$$



$$\frac{7}{8} \text{ of } 1600$$

$$\frac{4}{9} \text{ of } 20$$

$$\frac{8}{9} \text{ of } 360$$

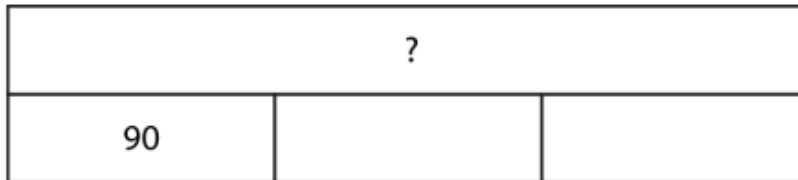
$$\frac{7}{10} \text{ of } 2000$$



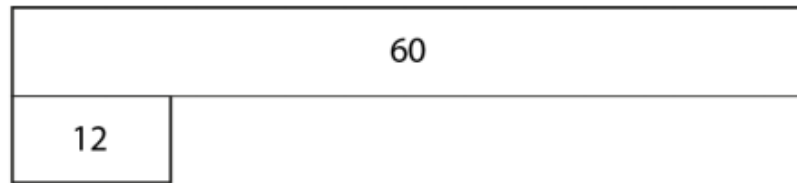
25.05.2022

Solving fractions problems.

- 'There are 90 children in $\frac{1}{3}$ of the playground. How many children are in the whole playground, if there are an equal number of children in each part?'



- '60 children choose their favourite sport. 12 children choose swimming. What fraction of the children is this?'



'Circle the calculations that are equivalent to $\frac{1}{3} \times 204$.'

$204 \times \frac{1}{3}$ 3×204 $204 \div 3$
 $3 \div 204$ $\frac{1}{204} \times 3$

$$\frac{1}{9} \times 414 = \square \div \square$$

$$\frac{1}{\square} \times \square = 270 \div 4$$



25.05.2022

Solving fractions problems - Challenge

There are 180 children taking part in a hockey tournament.

UCPS has two equal teams that make up $\frac{1}{2}$ of the tournament attendees. How many players did each of their teams have?

6

On the first day, in Team 1, $\frac{1}{2}$ of the team did not play. How many players played a match?

5

$\frac{2}{3}$ of the children who played scored a goal. How many children scored a goal?

3

$\frac{1}{4}$ scored 3 goals, $\frac{2}{4}$ scored 2 goals and $\frac{1}{4}$ scored 1 goal. How many goals did the team score in total?

4

4

4

Extra challenge—can you create your own word problem like the one above?