## L.K: Unit fractions of quantities

"Unit fractions of quantities" means that the fraction has a ' 1 ' as its numerator. For example, $\frac{1}{4}$ of 4 would be a unit fraction of a quantity.
"Non-unit fractions of quantities" means that the numerator is anything other than a ' 1 '. For example, $\frac{2}{5}$ of 5 would be a non-unit fraction of a quantity.

To work out a unit fraction of a quantity, we need to divide the whole number in the equation by the denominator and then multiply it by the numerator. For example,

## $\frac{1}{5}$ of $20=$

$20 \div 5=4$

## $4 \times 1=4$

Our answer would be 4.
Now practice this with the questions below. Remember to divide the whole number by the denominator and then multiply your answer by the numerator.

1) $\frac{1}{3}$ of $12=$
2) $\frac{1}{4}$ of $20=$
3) $\frac{1}{6}$ of $24=$
4) $\frac{1}{7}$ of $49=$
5) $\frac{1}{9}$ of $72=$
6) $\frac{1}{11}$ of $121=$
7) $\frac{1}{8}$ of $192=$
8) $\frac{1}{4}$ of $2164=$
9) $\frac{1}{13}$ of $273=$

## One Star

1) "When we work out a unit fraction of a quantity, the numerator is ALWAYS 1". Am I correct? How do you know?
2) There are sixteen children in the playground.

3 of them wear blue hats.
4 wear green hats.
9 wear yellow hats.
What fraction of the children in the playground wear:
a) Blue hats?
b) Green hats?
3) There 10 Jaffa Cakes in each box. If there are two boxes of Jaffa Cakes and 8 Jaffa Cakes are eaten, what fraction of the total amount of Jaffa Cakes have been eaten?

## Two Star

1) Always, Sometimes, Never?

Alex says,


Explain your answer
2)


Explain how you know.
3) Peter has three pizzas that he cuts into 4 equal pizzas. This means that each pizza has been made into quarters. He gives away 1 slice from every pizza.
Answer the following:
a) How many slices has he given away?
B) What fraction of the original amount of pizza slices does he have left?

4) "When we work out a unit fraction of a quantity, the denominator is ALWAYS going to be 1." Am I correct?

## Three Star

1) Always, Sometimes, Never?

Alex says,


Explain your answer
3) Can you make and answer your own problem using this image?

2) Peter has three pizzas that he cuts into 4 equal pizzas. This means that each pizza has been made into quarters. He gives away 1 slice from every pizza.
Answer the following. Make sure to explain all of your answers using evidence!:
a) How many slices has he given away?
B) What fraction of the original amount of pizza slices does he have left?
c) Can you show the above problem using pictures in your book?
4) "What is the difference between a unit fraction of quantity and a non-unit fraction of a quantity?" How do you know you are correct?

