

### Finding fractions of a group of objects

It's easiest to explain this by looking at an example question I think. So let's say I want to find  $\frac{1}{4}$  of 12.

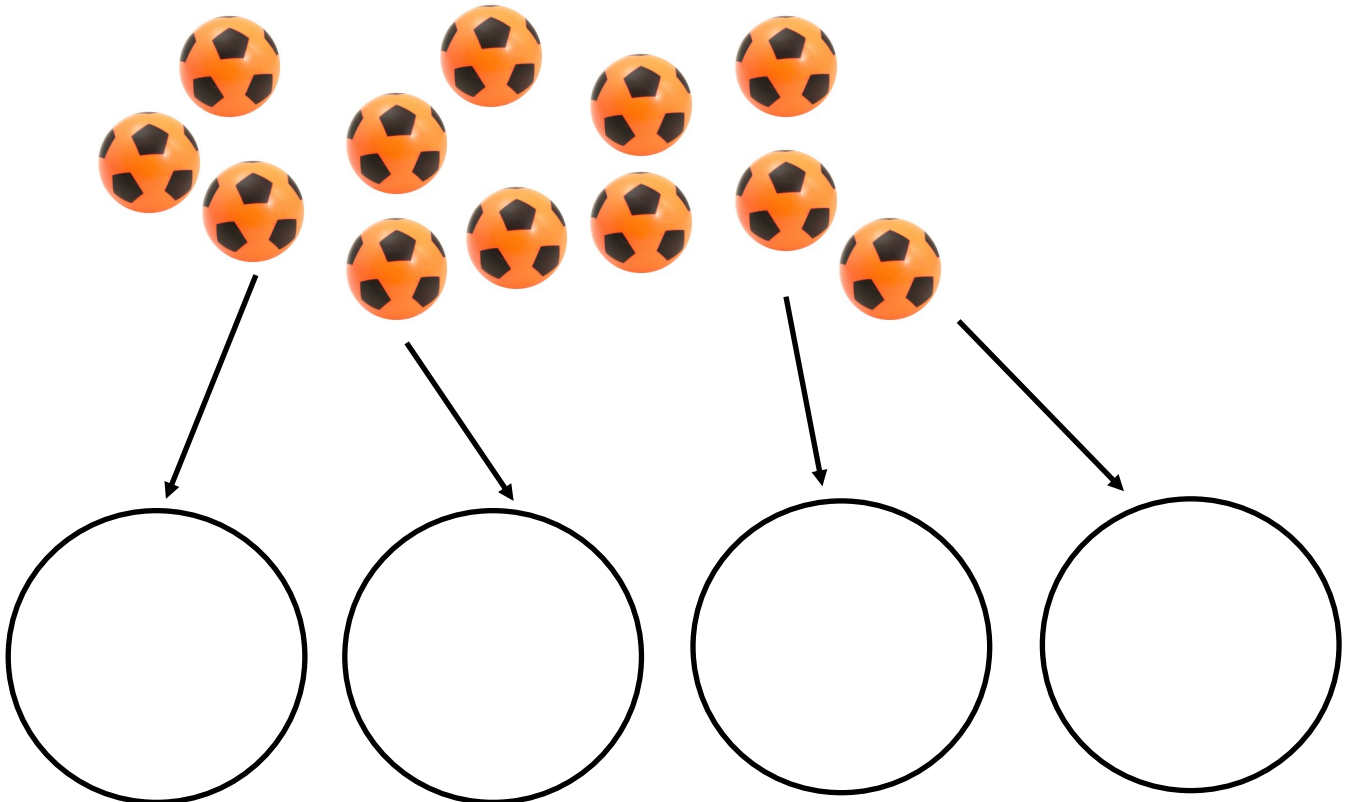
Here are my twelve objects:



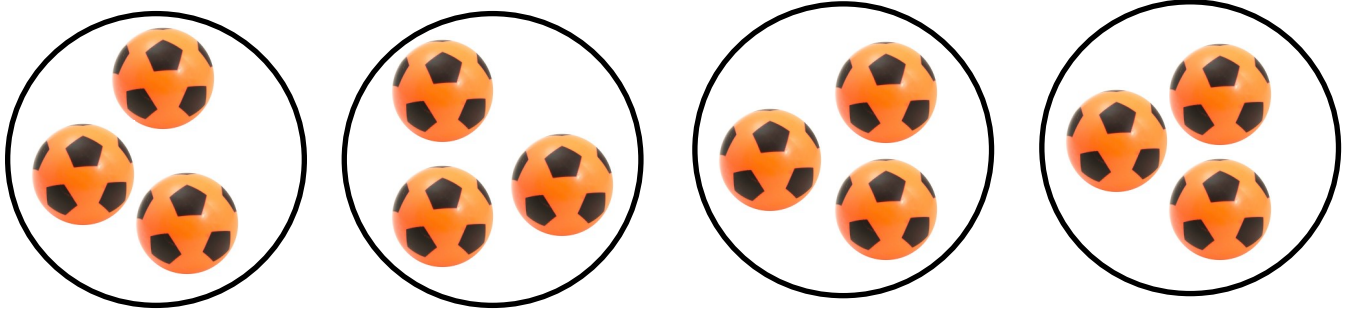
Now to find  $\frac{1}{4}$  of this group, I need to remember what the different parts of the fraction really mean.

The denominator in this case is four, which means I want to share out these objects into **four equal** groups. (we've had lots of practise doing this in division remember!)

So I start by moving them one by one into four separate piles...



Until I've got none left and all my objects are in four equal groups:



So now my group of objects has been divided into *quarters*.

$\frac{1}{4}$  just means one of those groups. So how many of the objects are in one of the groups?

**Answer:** There are three objects in each group.

So  $\frac{1}{4}$  of 12 = 3.

Your turn now! I want you to go and grab a group of objects, it can be anything you want- toy cars, dolls, lego bricks, pasta shells... even sweets if mum and dad allow to keep you motivated! Just make sure you've got plenty. Then have a go at the questions below.

$$\frac{1}{3} \text{ of } 15 =$$

$$\frac{1}{3} \text{ of } 12 =$$

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

$$\frac{1}{4} \text{ of } 28 =$$

$$\frac{1}{6} \text{ of } 18 =$$

$$\frac{1}{7} \text{ of } 21 =$$

$$\frac{1}{8} \text{ of } 24 =$$

$$\frac{1}{4} \text{ of } 16 =$$

If you've got the hang of it already and spotted how to do this using the division facts that you know, have a go at these for a bit more of a challenge. Fill in the missing symbol < > or = . The first one has been done for you.

$$\frac{1}{4} \text{ of } 20 \quad \boxed{<} \quad \frac{1}{3} \text{ of } 18$$

( = 5 )                      ( = 6 )

$$\frac{1}{2} \text{ of } 20 \quad \boxed{\phantom{<}} \quad \frac{1}{3} \text{ of } 30$$

$$\frac{1}{8} \text{ of } 32 \quad \boxed{\phantom{<}} \quad \frac{1}{7} \text{ of } 28$$

$$\frac{1}{4} \text{ of } 16 \quad \boxed{\phantom{<}} \quad \frac{1}{3} \text{ of } 12$$

$$\frac{1}{5} \text{ of } 45 \quad \boxed{\phantom{<}} \quad \frac{1}{3} \text{ of } 24$$

$$\frac{1}{5} \text{ of } 35 \quad \boxed{\phantom{<}} \quad \frac{1}{5} \text{ of } 40$$

$$\frac{1}{3} \text{ of } 27 \quad \boxed{\phantom{<}} \quad \frac{1}{6} \text{ of } 48$$

$$\frac{1}{8} \text{ of } 72 \quad \boxed{\phantom{<}} \quad \frac{1}{2} \text{ of } 24$$

Then for you really *really* keen beans. Have a go at the problem below, look **very carefully** at the wording. Think about what you actually know is there and what you have to figure out.

**Jasmine runs a fruit stall.**

**She has one tenth of her fruit left. |**



**How much fruit did she start with altogether? Explain your answer.**