Number Champions
1 2 3 4 5
fun + skills = confidence

Resource for Year 2 Core Curriculum

Year 2: Understand simple fractions of small numbers e.g. 1/3 of 6. Relate to division.

Find a Fraction 3 in a Row

Aim of the Game

Find 3 fractions of an amount in a row to win.

You will need

$\frac{1}{2}$ of	$\frac{1}{3}$ of	$\frac{1}{4}$ of
$\frac{1}{4}$ of	$\frac{1}{2}$ of	$\frac{1}{3}$ of
$\frac{1}{3}$ of	$\frac{1}{4}$ of	$\frac{1}{2}$ of

6	15	12
8	12	24
36	24	16

21	30	9
10	22	16
8	12	20

Before you play

- Check that the child is able to **recognise** a half, a third and a quarter before this activity (see year 1 division resources).
- Focus on using concrete resources and pictorial representations to support understanding.
- Make links to division skills.
- Children could start by sharing bean bags or counters into two/four equal groups.
- Make the link that when they find ½ of a number, they need to divide the number by 2, the denominator of the fraction. Similarly, when finding a ¼ they need to divide by 4 and finding $^1/_3$ means dividing by 3.
- Children could also use related facts to help them find ½ of greater numbers, for example using ½ of 4 to work out ½ of 40.

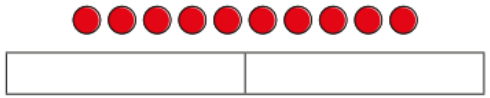
The activities in the table on the next page support children in **finding** a half or quarter of an amount in different ways. It's a best to make sure they are confident in how to find a half before moving on to finding a quarter and finally thirds.

Sharing with Bar Models

Describing with mathematical language

Finding a half

Share 10 counters between the two groups.



Complete the sentences.

The counters have been shared equally between _____ groups.

There are _____ in each group.

$\frac{1}{2}$ of 10 is equal to _____

Finding a quarter

Use the bar model to help share the 8 grapes equally between four people.

The grapes are split into _____ equal parts.

Each part is worth a _____

$\frac{1}{4}$ of 8 is equal to _____

Finding a third

Use the cubes to make three equal groups.

There are _____ cubes altogether.

A third of _____ is _____

$\frac{\square}{\square}$ of _____ is _____

Dividing arrays

Finding a half

Ann uses an array to find $\frac{1}{2}$ of 22

$\frac{1}{2}$ of 22 is equal to 11

Use Ann's method to find $\frac{1}{2}$ of each number.

- 12
- 18
- 24

Finding a quarter

Circle $\frac{1}{4}$ of the cars.

One quarter of _____ is _____

_____ is $\frac{1}{4}$ of _____

Finding a third

Circle $\frac{1}{3}$ of the counters.

$\frac{1}{3}$ of 9 = _____

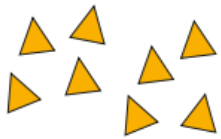
Is there more than one way to circle $\frac{1}{3}$?

Why? Will this always work?

Dividing sets of objects

Finding a half

Find $\frac{1}{2}$ of each set of objects.



Finding a quarter

Kay, Jo and Ron share six sweets equally.

Draw circles to show how they share them.

The whole has been split into _____ equal groups.

There are _____ in each group.

$\frac{1}{3}$ of 6 = _____

Finding a third

Find $\frac{1}{3}$ of each set of objects.

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

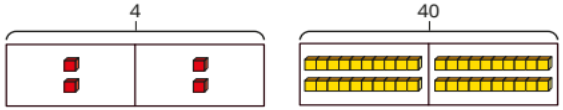
$\frac{1}{3}$ of 18 = _____

$\frac{1}{3}$ of 21 = _____

Making links. Place value and multiplication/division

Finding a half

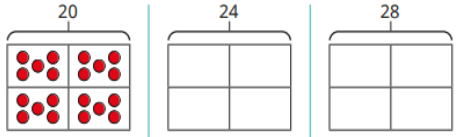
Use base 10 and bar models to work out the calculations.



- $\frac{1}{2}$ of 4 = _____
- $\frac{1}{2}$ of 40 = _____
- $\frac{1}{2}$ of 6 = _____
- $\frac{1}{2}$ of 60 = _____

Finding a quarter

Use bar models to find $\frac{1}{4}$ of each number.



$\frac{1}{4}$ of 20 = _____

$\frac{1}{4}$ of 24 = _____

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

What do you notice?

Finding a third

Use base 10 /Dienes and bar models to work out the calculations.

6

60

$^1/_3$ of 6 = ___

$^1/_3$ of 9 = ___

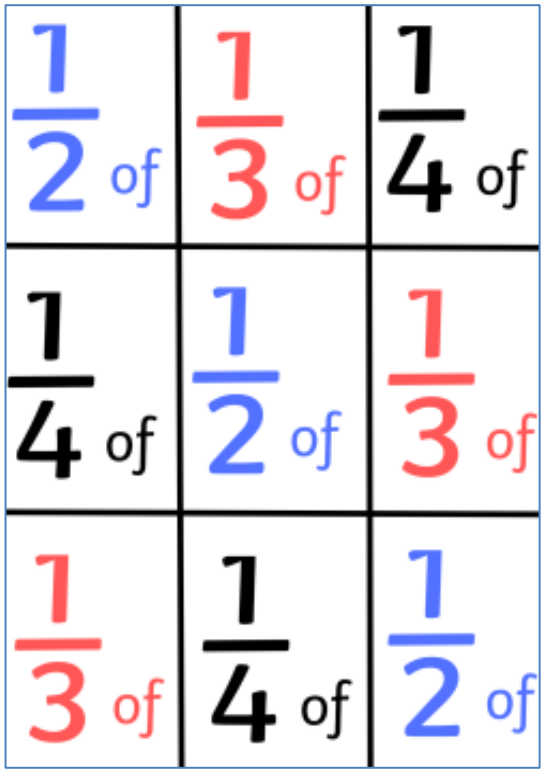
$^1/_3$ of 60 = ___

$^1/_3$ of 90 = ___

Play

- Set up is based on the noughts and crosses 3 by 3 chart. The objective is to place your counter in 3 spaces in a row horizontally, diagonally or vertically.
- Each space has a prompt to either find a half, quarter or third of an amount which must be solved correctly to be allowed to place your counter on it.
- There are 3 piles of numbers cards to choose from depending on the fraction to find. I colour coded them to make 3 distinct piles of multiples of 2 (blue), 3 (red) and 4 (black).
- Player 1 choses a space to start e.g. "½ of" space in the middle row and picks a card from the corresponding blue number pile e.g. 12.
- They need work out ½ of 12 using concrete and pictorial models as shown previously.
- If they solve it correctly, they place their counter in the space.
- Players take turns trying to make three in a row or blocking the other player.

Play board – print or make by hand



Multiples of 2, 3 and 4 colour coded – print and cut or make by hand.