# Harry Potter \& The Magical Potions 



Investigating ratio \& proportion

## Ratio

- Ratio = ' to every' or ' For every'
- Ratio compares part with part e.g.



## What is the ratio .....



## What is the ratio of .....

- Wands to broomsticks



## Draw ...

## A picture to show the ratio of

## Hats to spell books 4:3



## Proportion

- Proportion = 'In every' or 'Out of '
- Proportion compares part with whole
- it is more like a fraction



## What is the proportion .....



## What is the proportion of



## Draw ...

## A picture to show the proportion :

3 in every 5 is Hats


## Hartys Magical Potions

## Harry's Frog Potion

- Harry has been mixing his ingredients and made a potion to turn people into frogs. Look at the ingredients and answer the questions using your knowledge of ratio and proportion



## Frog Delight

## 300 g Fresh Frogs eyes 120 g frog spawn 75 g pond water

(makes enough for 9 people)


Harry makes the potion using 900 g of frogs eyes
What weight of frog spawn should he use?
What weight of pond water?
Ron slips and only put in 25 g of pond water.
How much of the other 2 ingredients will he now need - how many
people will this turn into frogs?


## Hogwart Hash

250ml Muggle blood 50 g Wizard hair


1 kg (being 1000g) owl feathers 750 g Hagrids whiskers (makes 20 portions)

Dumbledore orders enough Hogwart Hash for Hufflepuff (100 people) How much of each ingredient is needed?

Hermione says we only have 200 g of owl feathers left - How many people will that feed?

Snape is annoyed - he wants to feed the whole of Hogwarts - 800 people.
How much muggle blood will you need?

## Your Task....



- Help Harry work out the correct amounts for his potions before Professor Snape finds out he has been messing about and reports him to
Dumbledore.


