# Maths Mastery Solve Problems Involving Relative Sizes of Two Quantities 



## Ratios

Complete this table showing the number of balls in any number of bags:

| Bags of balls | Blue balls | Green balls | Yellow Balls |
| :--- | :--- | :--- | :--- |
| 1 | 4 | 5 | 3 |
| 2 | 8 | 10 | 6 |
| 3 | 12 | 15 | 9 |
| 5 | 20 | 25 | 15 |
| 10 | 40 | 50 | 30 |
| 25 | 100 | 125 | 75 |
| 50 | 200 | 250 | 150 |
| 100 | 400 | 500 | 300 |
| 120 | 480 | 600 | 360 |

## Ratios

Complete this table showing the scaling of ingredients for scones:

| Batch | Flour (kg) | Butter (kg) | Sugar (kg) |
| :--- | :--- | :--- | :--- |
| 1 | 0.225 | 0.05 | 0.025 |
| 2 | 0.45 | 0.1 | 0.05 |
| 3 | 0.675 | 0.15 | 0.075 |
| 5 | 1.125 | 0.25 | 0.125 |
| 8 | 1.8 | 0.4 | 0.2 |
| 10 | 2.25 | 0.5 | 0.25 |
| 12 | 2.7 | 0.6 | 0.3 |
| 25 | 5.625 | 1.25 | 0.625 |
| 30 | 6.75 | 1.5 | 0.75 |

## Ratios

Complete this table showing the number of items of stationery in any number of packs:

| Stationery Packs | Pens | Pencils | Rubbers |
| :--- | :--- | :--- | :--- |
| 1 | 6 | 8 | 3 |
| 2 | 12 | 16 | 6 |
| 5 | 30 | 40 | 15 |
| 8 | 48 | 64 | 24 |
| 10 | 60 | 80 | 30 |
| 15 | 90 | 120 | 45 |
| 24 | 144 | 192 | 72 |
| 50 | 300 | 400 | 150 |
| 90 | 540 | 720 | 270 |

## Ice Cream

Here are the ingredients for banana and blueberry ice cream: 1 lemon
125 g mascarpone
6 tbsp icing sugar
12 blueberries
1 banana
I have a packet of 48 blueberries. How much of the other ingredients will I need to make the ice cream using all the blueberries?
4 lemons, 500 g mascarpone, 24 tbsp icing sugar and 4 bananas.
1 tablespoon of icing sugar weighs 8 g . If I make the recipe with 1 kg of mascarpone, what weight of icing sugar will I need?
48 tbsp $=384 \mathrm{~g}$
Create your own recipe question for a partner.

## Sharing Pizzas

4 children share 6 pizzas


2 more children join the group.
Each have the same amount of pizza.


So 3 more pizzas are needed.


