**Simplifying Ratio**

**Green** – these questions are not too tricky so try these to get you started. Simplify:

|  |  |  |  |
| --- | --- | --- | --- |
| e.g. 8 : 12 = **2 : 3** | 4) 6 : 9 = | 8) 6 : 18 = | 12) 16 : 8 = |
| 1) 20 : 30 = | 5) 10 : 100 = | 9) 11 : 22 = |
| 2) 7 : 14 = | 6) 9 : 18 = | 10) 24 : 12 = |
| 3) 6 : 12 = | 7) 4 : 16 = | 11) 10 : 20 = |

**Orange** – these questions are a little trickier than the green questions. Simplify:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| e.g. 4 : 8 : 12 = **1 :** **2 : 3** | 4) 1 hour : 20 mins = | | 8) 1 day : 6 hours = | |
| 1. 2 hours : 30 mins = | | 5) £1 : 70p = | |
| 1. 50p : £2.50 = | | 6) 70p : £1 = | |
| 1. 20cm : 15cm = | | 7) 4km : 12km = | |

**Red** – these questions are the trickiest and may require you to interpret worded questions.

|  |  |
| --- | --- |
| e.g. 4 : 8 : 12 : 24 = **1 : 2 : 3 : 6** | |
| 1. There are 32 pupils in a class. 20 of them are girls. What is the ratio of boys to girls in its simplest form? | 1. There are 50 sweets in a mixed pack. 25 are jellies, 10 are fizzy cola bottles and the rest are boiled. Write the ratio of each type of sweet in its simplest form. |
| 1. A fruit drink is made by mixing 60ml of orange juice with 180ml of pineapple juice. What is the ratio of orange juice to pineapple juice in its simplest form? | 1. Concrete is made by mixing sand, water and concrete mix in the ratio of 6 parts sand, 3 parts water and 3 parts concrete mix. What ratio is this in its simplest form? |

**Dividing Ratio**

Steps to Success

1. Add together the total number of parts of the ratio
2. Divide the given amount by the total number of parts
3. Multiply the answer by each ratio amount
4. Check that your answers add up to the same total given in the question

**Green** – these questions are not too tricky so try these to get you started.

|  |  |
| --- | --- |
| 1. Divide £50 into the ratio 1 : 4 | 1. Divide 40 litres into the ratio 1 : 3 |
| 1. Divide £10 into the ratio 2 : 3 | 1. Divide 500g into the ratio 2 : 3 |
| 1. Divide 100ml into the ratio 3 : 7 | 1. Divide 30cm into the ratio 2 : 4 |

**Orange** – these questions are a little trickier than the green questions.

|  |  |
| --- | --- |
| 1. Divide 49p in the ratio 4 : 2 : 1 | 1. Divide £350 in the ratio 4 : 2 : 1 |
| 1. Divide £250 in the ratio 3 : 6 : 1 | 1. Divide 120cm in the ratio 1 : 2 : 3 |
| 1. Divide 51g in the ratio 1 : 2 | 1. Divide 68p in the ratio 1 : 2 : 1 |

**Red** – these questions are the trickiest and will require you to interpret worded questions.

|  |  |
| --- | --- |
| 1. Mr Martin has 120 CDs. The ratio of indie CDs to dance CDs is 5 : 7. How many of each type of CD does he have? | 1. Mr Martin has 36 calculators in a box. The ratio of ordinary calculators to scientific is 5 : 1. How many of each calculator does he have? |
| 1. There are 1400 students in Plantsbrook School with a ratio of 4 : 3 boys to girls. How many boys and how many girls are there? | 1. 180 people go bowling, the ratio of adults to children is 5 : 4. How many adults and how many children go bowling? |