

S2 skills homework – November – Ratios

1. Divide each figure by the smallest one – usually this is the answer
2. If some of the figures are not whole numbers, try multiplying them all by 2 or 3 to make them whole numbers

Write down the following ratios in their simplest form.

1. Six, four and one
2. Six, four and two
3. Eight, four and two
4. Twelve, fifteen, three
5. Twenty four, fifteen and six

Write down the ratio of the following units in their simplest form

6. Twelve millimetres, forty eight millimetres and three millimetres
7. 15 seconds, 18 seconds and 9 seconds
8. 6 grams, 4 grams and 12 grams

9. The table below gives information about structures in the blood.

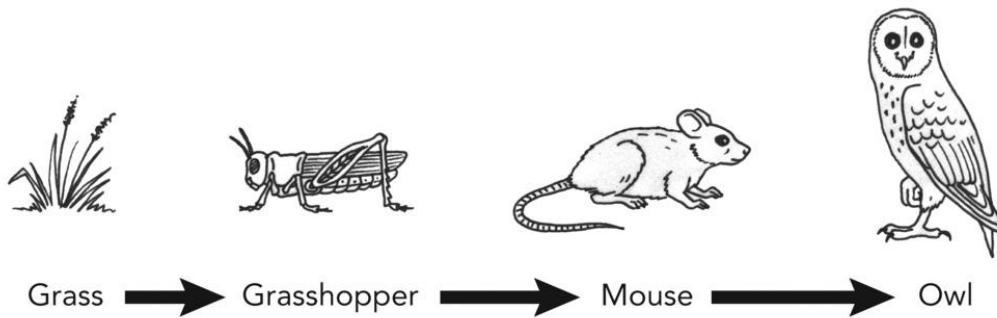
Name of structure	Number in 1cm^3 of blood (millions)
Red blood cells	56 000
White blood cells	80
Platelets	4 000

Complete the simple whole number ratio below to show the relative numbers of each structure in 1cm^3 of blood

_____ : _____ : _____

White blood cells Platelets Red blood cells

10. The diagram below shows a food chain for a local woodland.



Over the course of **1 day**

2 owls will eat 6 Mice and 6 Mice will eat 42 grasshoppers.

- a. What is the **simplest** ratio of **Owls : Mice : Grasshoppers**?
- b. How many Mice are needed per day to feed a family of 4 Owls?
- c. How many Grasshoppers would be needed to feed the same family over the course of **1 week**?

11. A Rabbit breeder counts up the number of white and black Kittens (baby Rabbits) and records the number based on different parent rabbit combinations.

The results are shown below

Parents	No. of Black	No. of White	Ratio of Black : White
Black x Black	6	2	
Black x White	5	5	
White x White	4	6	

- a. Complete the table by calculating the ratio of Black : White Kittens and writing it in its **simplest form**
- b. **2 Black rabbit parents** produce a litter of 12 Rabbits. How many of them will have **Black** fur?
- c. **2 White rabbit parents** have 6 Black kittens. How many **White Kittens** were in the same litter?