



KS3 Maths at Marwell Feeding the lemurs



Feeding the lemurs

This activity introduces ratios

It is designed to give lower ability students a sense of what ratio means, and an opportunity to find equivalent ratios in a practical context.



Getting started:

- 1. Print out the 'Feeding the Lemurs' worksheet
- 2. Print out the apple and trio munch cut out sheets in colour. I if you don't have access to a colour printer or photocopier, try copying the apples onto red paper and trio munch onto brown)

Set the scene by introducing the ring-tailed lemur. It is fed apples and 'trio munch' biscuits in the ratio 2:1. Make sure that students know what this means and can describe it as twice as many apples as trio munch.

Then the students can cut out the apple and trio munch squares to find combinations of feeds in the ratio 2:1 e.g. 400g apples to 200g trio munch.

EXTENSION:

The students could make display posters of all the feed combinations in the ratio 2:1. Students can then have a go at finding other equivalent ratios, e.g. 2:3 and 4:6 etc.

This activity can last anything from 1 lesson to 3 lessons depending on how much the students are getting out of it.

With many thanks to Jo Kershaw and Denefield School for their extensive contribution to developing this resource

Curriculum Links

MATHS

Ratio, proportion and rates of change

- use ratio notation, including reduction to simplest form
- divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio
- understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction



Feeding the lemurs

Ring-tailed lemur

Lemur catta

Distribution: Southern half of

Madagascar

In the wild, lemurs are only found on the African island of Madagascar. They are primates, related to apes and monkeys. Ring-tailed lemurs are sociable animals and live in groups of up to 24 individuals. In these groups, females always out-rank the males!



At Marwell, there are 4 different species of lemur: the ring-tailed lemur, red ruffed lemur, black and white ruffed lemur and Alaotran gentle lemur.

Questions

Imagine you are a keeper and you need to feed the ring-tailed lemurs apples and 'trio munch' biscuits in the ratio 2:1.

Cut out the apple and trio munch squares on the following page. Put them together to see how many combinations you can come up with in the ratio 2:1 e.g. 200g apples to 100g trio munch.

These different combinations are known as **equivalent ratios**. Write some of the equivalent ratios here.

How much apple do you need compared to trio munch – the same amount, twice as much, or three times as much?

How much apple should you weigh out for 200g of trio munch?

How much trio munch should you weigh out for 600g of apple?



