

Zoo Keeper Mathematics

Complete the following exercises to discover how Zoo Keepers use maths in their work at ZSL Whipsnade Zoo.

Exercise One



The six lions at ZSL Whipsnade Zoo are due their annual vaccinations.

The recommended dose is worked out as 0.15ml/kg.

Calculate the dosage of vaccination each lion should receive:

Animal	Weight	Dosage (ml)
Mashaka-Lila	160 kg	24
Kachanga	170 kg	25.5
Max	220 kg	33
Tato	180 kg	27
Kato	175 kg	26.25
Kia	120 kg	18

The vaccinations come in vials of 5ml. For hygiene, a separate vial must be used for each animal and disposed once opened.

How many vials should the keeper order from the vet?

34

Exercise Two



Karishma the Asian elephant gave birth to calf Elizabeth in June 2016, who weighed a whopping 130kg when she was born.

Elephant calves grow fast and gain approximately 0.9 kg in weight per day in their first year of life.

How much would you have expected Elizabeth to weigh on her first birthday?

458.5kg

ZSL Whipsnade Zoo houses a breeding group of endangered Asian Elephants. It is important that keepers keep records of the animals in a studbook to monitor the population of breeding animals in zoos around the world.

Elephant	Sex	Date of Birth
Emmett	M	10.07.91
Mya	F	04.03.82
Kaylee	F	20.07.82
Lucha	F	24.05.82
Karishma	F	27.08.98
Donna	F	23.07.09
Sam	M	16.09.14
Elizabeth	F	10.06.16

What is the male : female ratio of elephants at ZSL Whipsnade Zoo?

1:3

What is the mean age of the elephant herd at ZSL Whipsnade Zoo?

As of 01.01.19 – 21.25