Zookeeper Maths Problems

Being a zookeeper means you have to care for a wide variety of animals, each of them with unique needs. Sometimes, that means doing a bit of maths to make sure your animals get the right amount of food or medicine. See if you can think like a zookeeper and solve these problems!

1. Loki the otter needs a lot of food every day. He needs to eat 15% of his body weight in fish. He weighs 8.74 kg. If each herring weighs 57.0 g, how many herrings does he get to eat today?

2. The rangers are building a new enclosure for the lynx, including a big treehouse for them. They need to know what length of wood to use for a ramp to the treehouse. The first platform will be 1.20 m off the ground and you would like the ramp to be at a 35° angle to the ground. How long will the ramp be?



3. Our wolf cubs are growing up fast and the vet weighed them at their 12 week checkup. Augustus weighed 12.2 kg, Maximus weighed 13.4 kg, Tiberius weighed 11.7 kg, and Minimus, the runt, weighed 10.8 kg. Calculate the mean and median of their weights. If the median weight for their age is expected to be 11.8 kg, which cubs are underweight?

4. Our bears, Fluff and Scruff, need to eat a lot of food toward the end of summer so they can fatten up for their upcoming hibernation. They need to 20,000 calories each per day. The ratio of plants to meat that they need to eat is 3:1. On average, one cabbage is 300 calories, one carrot is 25 calories, one parsnip is 50 calories, one sweet potato is 125 calories, one apple is 100 calories, one chicken is 2000 calories and one trout is 300 calories. Come up with a sample menu for each bear to make sure they get the right amount and kind of food in one day.

