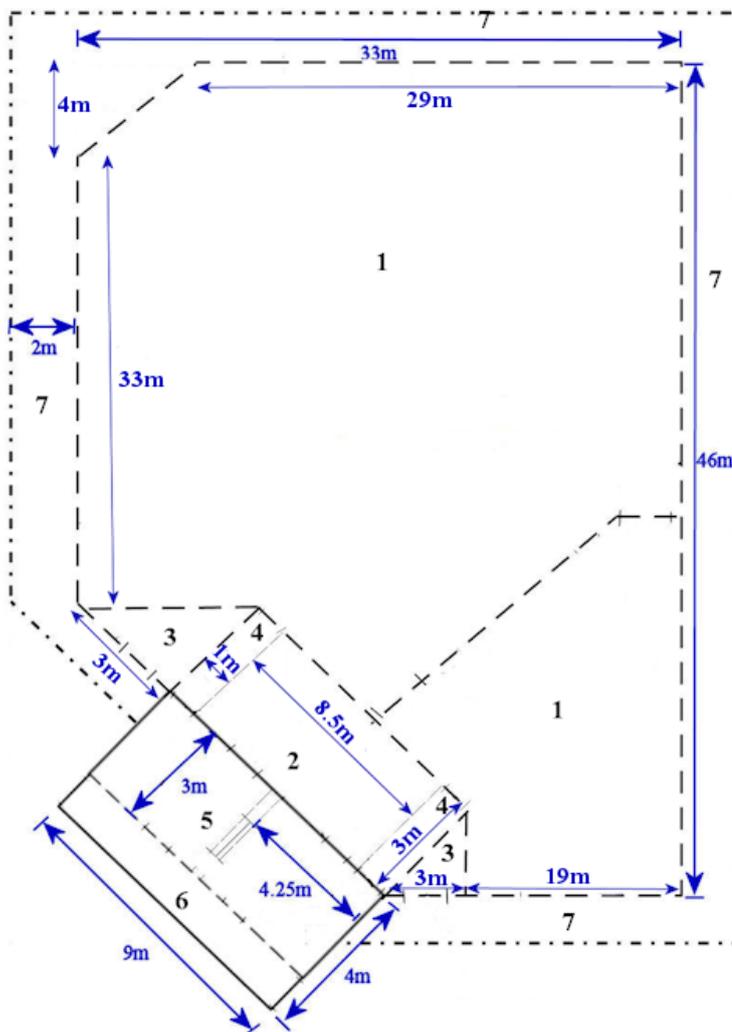


Key Stage 4 Question Sheet

1

Below is a plan of the Tiger enclosure at Wingham Wildlife Park showing all relevant measurements along with descriptions of key areas of the enclosure.



Key areas of the enclosure

- 1) Main outdoor housing.
- 2) Keeper outdoor safe access area.
- 3) Further keeper outdoor areas.
- 4) Animal crush cage.
- 5) Main indoor housing area.
- 6) Keeper secure access corridor in indoor housing.
- 7) Space between enclosure & boundary fence.

How much area (in m^2) do the 2 Tigers at Wingham Wildlife Park have access to? This should include all indoor & outdoor housing, as well as crush cages (which are used as access corridors for the animals). Only keeper staff have access to areas 2, 3, 6 and 7.

Show your working out on the lines provided or in the image above.

Final Answer = -----

2

In 2006 Sanderson et al, worked on trying to list the threats which are faced by wild Bengal Tigers, showing a wide variety of problems. Surprisingly some of the lowest rated problems include hunting of Tigers and trade in Tiger parts. Below are some of the most pressing problems faced by Tigers, show why these problems may have such high importance for wild numbers:

A) Hunting of animals such as Deer and wild boar:

B) Low wild populations, segregated in to small unconnected pockets of suitable environment:

C) Expansion of human settlement:

3

At Wingham Wildlife Park we have a variety of animals which regularly breed at the park. These include reptiles, birds and mammals which have young in a variety of different ways. Can you match the name of the birth process with the animals?

Mouse Bird	Lays eggs which it will sit on & incubate.	Viviparous
Tree Viper	Young grow within eggs; however the mother retains the eggs and the young hatch on the way out of the females body.	Oviparous
Ring Tailed Lemur	The babies develop within the mother, being born fully formed.	Ovoviviparous

4

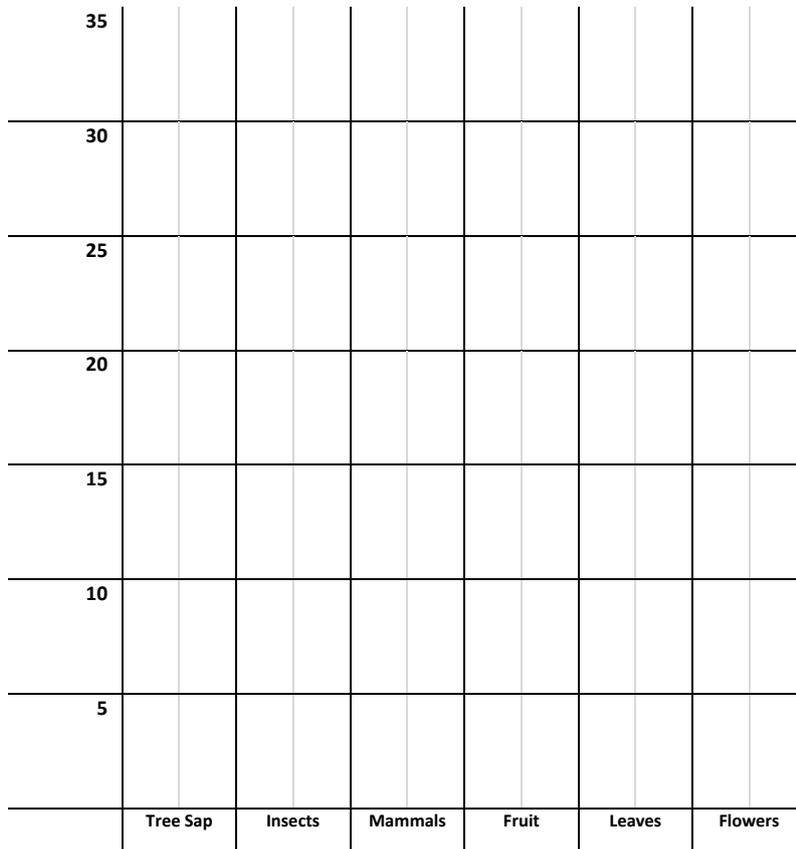
On the surface the Goeldi’s Monkey and Common Marmoset look very similar, but they have very different diets. As zoo keepers it is very important for our staff to match the natural diets of both species very carefully to ensure that our animals are healthy and of the best possible breeding standard. Below is a table which shows the percentages of various types of food eaten by each species:

Food Item	Goeldi’s Monkey	Common Marmoset
Tree Sap	5%	15%
Insects	20%	30%
Mammals	20%	5%
Fruit	20%	30%
Leaves	30%	10%
Flowers	5%	10%

A) Due to the size of both species they eat the same amount of food (approximately 75g per day). In the blank table below please convert the above percentages in to the correct volume of food in grams:

Food Item	Goeldi’s Monkey	Common Marmoset
Tree Sap		
Insects		
Mammals		
Fruit		
Leaves		
Flowers		

B) Finally using the following grid please plot the above amounts as a bar graph, using the correct key for each species:



Key

Goeldi’s Monkey

Common marmoset

5

As discussed earlier in this work sheet and shown on the Tiger conservation poster in our education centre (also available to download from the Key Stage Specific Work Sheets section of our website, under Teacher resources), there are numerous factors which affect wild animals. With all of these factors considered who is ultimately to blame for the fate of the worlds most endangered animals?

- The people who hunt them
- The people who cut down the trees which make up their environment
- The farmers who change the landscape in their environment
- The people who trade in endangered animal parts
- The consumers of endangered animal parts

6

For many years it was thought that the best strategy for helping wild animal numbers recuperate from a zoo standpoint was to breed these animals in captivity with the ultimate goal of re-introducing them in to the wild. However in recent years there have been various other strategies discussed which are thought to be more realistic and effective. Discuss whether you feel re-introduction in the wild is a viable option and support why you may or may not feel this is the case. If you do not agree with this what other options do you think may be of use to help the wild populations of animals.