



## Zoo Designer

You have been hired to design a new zoo for Edinburgh. The existing zoo is old and cannot keep up with the people who come to visit. You must design it using your maths knowledge of perimeter and time. Here is what you need to include:

- 1. Create enclosures for the zoo animals at the zoo:
  - Elephants a rectangular enclosure 10cm X 5cm
  - Lions a rectangular enclosure 9cm X 6cm
  - Giraffes a square enclosure 8cm X 8cm
  - Tigers a square enclosure 8cm X 8cm
  - Gorillas a triangle enclosure 10cm X 10cm X 10 cm
- 2. Work out the total perimeter of all your enclosures
- 3. Work out the area for each of your enclosures.
- 4. Create your own enclosures with a total perimeter of:
  - Hippopotamus 40cm
  - Butterflies 20cm
  - Seals 32cm
  - Koala's 24cm

## Don't forget:

- -Show your working out
- -Label all the enclosures
- -Write in centimetres
- -Make your timetable so it is easy for people to read and understand

After you have created your design, you must then create a timetable for visitors to see all of your animals. The zoo is open from 9:00am to 5:30pm. You must have every enclosure open for at least 1 hour a day. You don't want to have too much cross over with enclosure openings because then your visitors won't be able to see all of the animals. Think about the most popular animals and keep their enclosures open for longer than 1 hour to keep your visitors happy. You also have to consider how far the enclosures are away from each other as it might take some time to get from one enclosure to the next.

Once you have finished, you can spend some time making sure you have included pathways, green spaces, a restaurant/gift store and car park.