

# Maths - Handling data

## Task 1

### Animals of the African Savannah: Measurement Factsheet

|                                                                                                                                                                 |                                                                                                                                                           |                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| <p><b>Lion</b><br/><b>(<i>Panthera leo</i>)</b></p> <p>Height: 1.2 m<br/>Length: 2.1 m<br/>Weight: 195 kg</p>                                                   | <p><b>African elephant</b><br/><b>(<i>Loxodonta africana</i>)</b></p> <p>Height: 3.3 m<br/>Length: 6.75 m<br/>Weight: 6,000 kg</p>                        | <p><b>White rhinoceros</b><br/><b>(<i>Ceratotherium simum</i>)</b></p> <p>Height: 1.78 m<br/>Length: 3.85 m<br/>Weight: 2,300 kg</p>                           |
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| <p><b>Hippopotamus</b><br/><b>(<i>Hippopotamus amphibius</i>)</b></p> <p>Height: 1.5 m<br/>Length: 4.2 m<br/>Weight: 2,400 kg</p>                               | <p><b>Leopard</b><br/><b>(<i>Panthera pardus</i>)</b></p> <p>Height: 0.63 m<br/>Length: 1.45 m<br/>Weight: 50 kg</p>                                      | <p><b>Giraffe</b><br/><b>(<i>Giraffa camelopardalis</i>)</b></p> <p>Height: 5.3 m<br/>Length: 4.25 m<br/>Weight: 1,516 kg</p>                                  |
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| <p><b>Topi</b><br/><b>(<i>Damaliscus lunatus</i>)</b></p> <p>Height: 1.15 m<br/>Length: 1.78 m<br/>Weight: 118 kg</p>                                           | <p><b>Brown hyaena</b><br/><b>(<i>Hyaena brunnea</i>)</b></p> <p>Height: 0.75 m<br/>Length: 1.18 m<br/>Weight: 48 kg</p>                                  | <p><b>Plains zebra</b><br/><b>(<i>Equus quagga</i>)</b></p> <p>Height: 1.28 m<br/>Length: 2.32 m<br/>Weight: 280 kg</p>                                        |

## Handling Data: African Animal Maths Activity

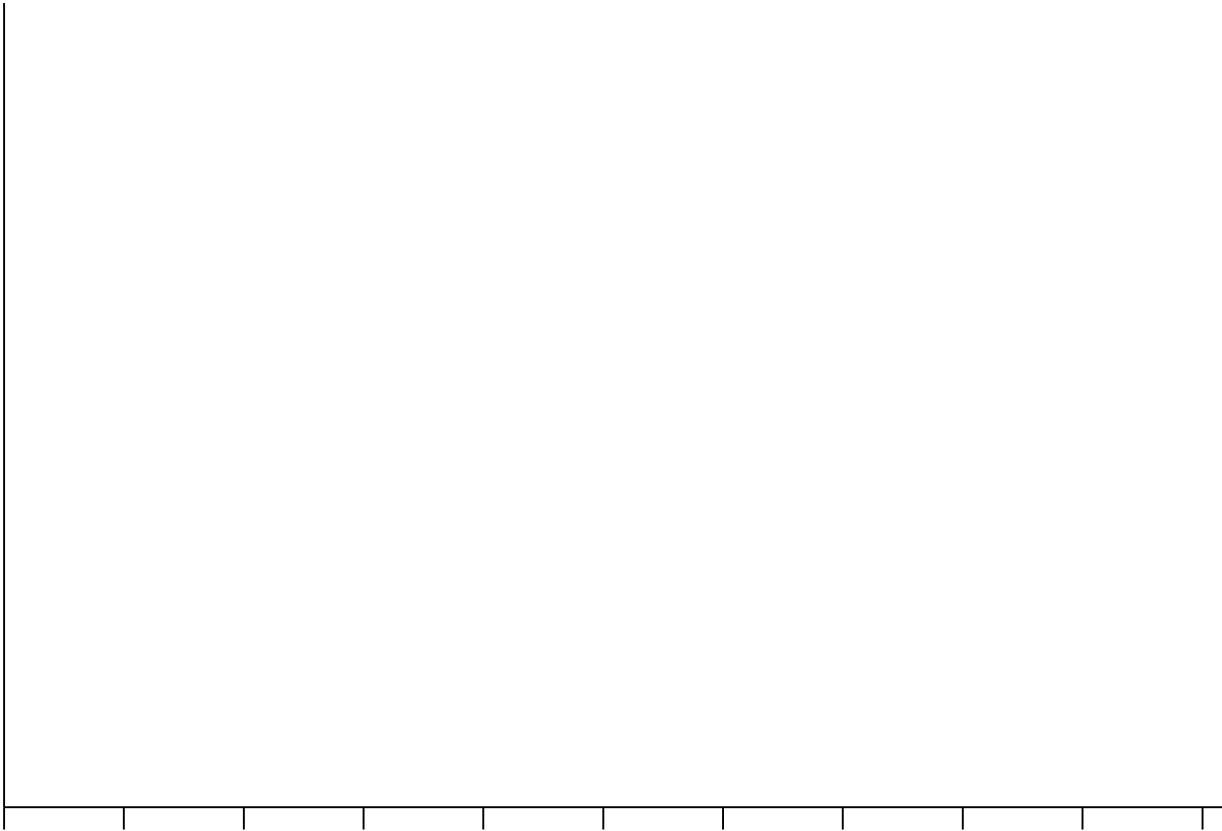
1. Fill in the table below with the height, length and weight of each of the species on the 'Animals of the African Savannah: Measurement Factsheet'.

2. The measurements are given in metres (m). Can you convert them into centimetres (cm) and add them into the table?

|                  | Height     |                  | Length     |                  | Weight         |
|------------------|------------|------------------|------------|------------------|----------------|
|                  | Metres (m) | Centimetres (cm) | Metres (m) | Centimetres (cm) | Kilograms (kg) |
| African elephant |            |                  |            |                  |                |
| Hippopotamus     |            |                  |            |                  |                |
| Giraffe          |            |                  |            |                  |                |
| White rhinoceros |            |                  |            |                  |                |
| Plains zebra     |            |                  |            |                  |                |
| Topi             |            |                  |            |                  |                |
| Brown hyaena     |            |                  |            |                  |                |
| Leopard          |            |                  |            |                  |                |
| Lion             |            |                  |            |                  |                |

## Task 2

Draw a bar chart that shows the height of each animal on the factsheet. Think carefully about which measurement to use (m or cm) and don't forget to label your graph!



Look at the graph. What is the name of the tallest animal?

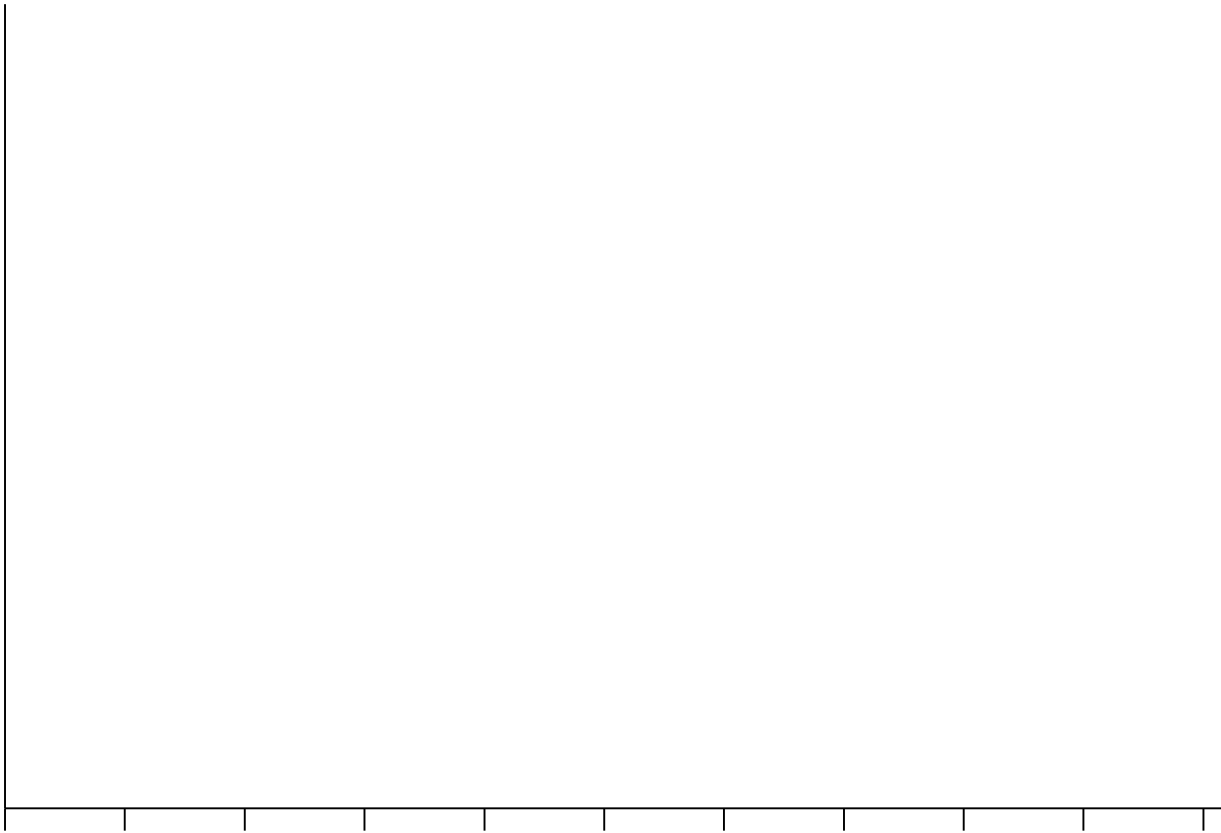
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What is the name of the smallest animal?

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### Task 3

Draw a bar chart that shows the length of each animal on the factsheet. Think carefully about which measurement to use (m or cm) and don't forget to label your graph!



Look at the graph. Which animal is the longest?

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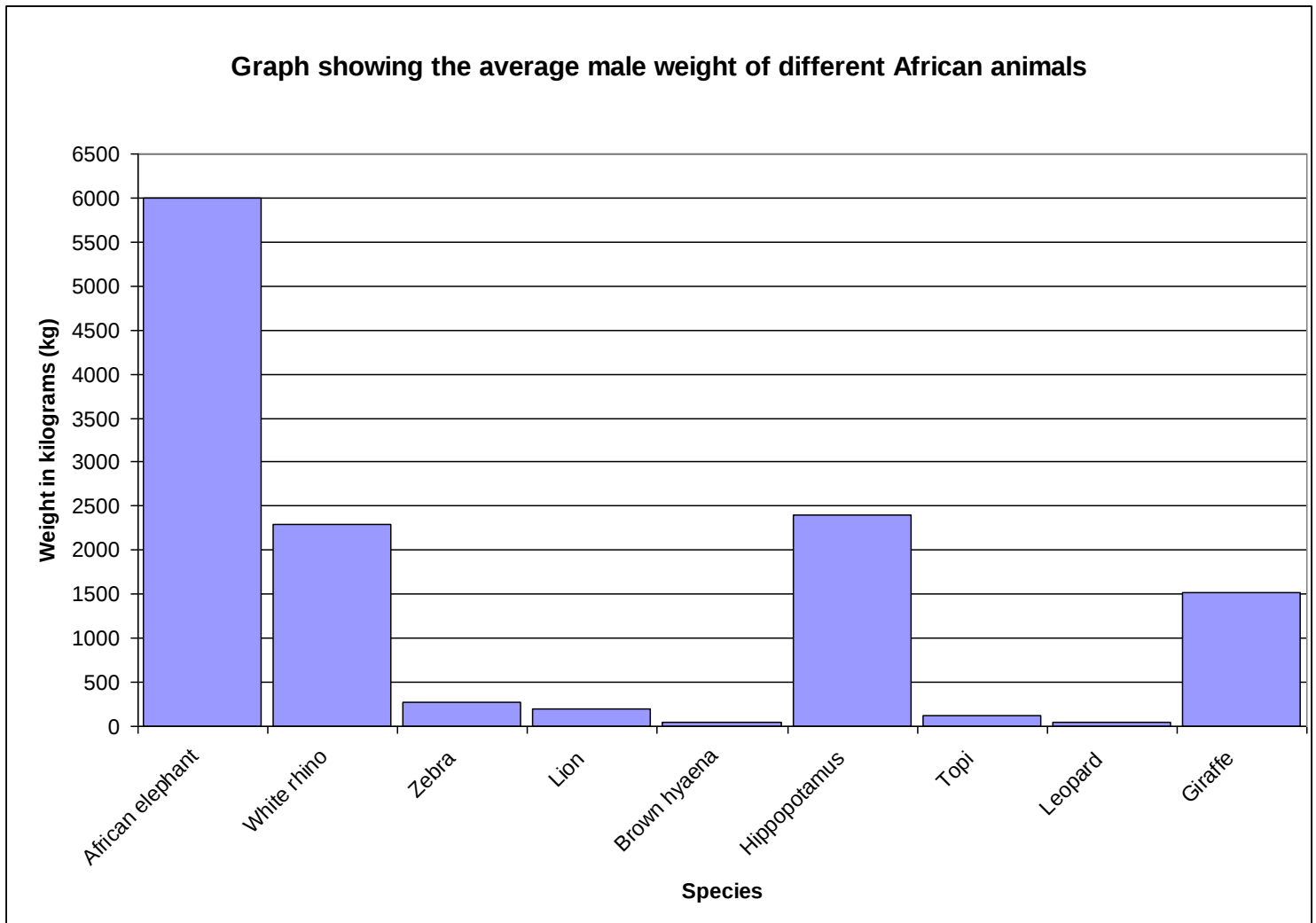
Which animal is the shortest?

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#### Task 4

The graph below shows the weight (in kg) of some of the animals that live in the African savannah. Look at this graph carefully and write out at least five different questions that you could ask to help interpret this graph.

Make sure you answer the questions as well!



1.

2.

3.

4.

5.

### Task 5

Can you create your own bar chart? You could do this by hand or you could create this using Excel on the computer. Can you remember how to do this? (We have done this before in ICT!). Here is a 'how to' guide in case you need a little reminder <https://www.excel-easy.com/examples/bar-chart.html>

| Species          | Height (Average male shoulder height) (m) | Length (Average male head-body length) (m) | Weight of average male (kg) |
|------------------|-------------------------------------------|--------------------------------------------|-----------------------------|
| African elephant | 3.3                                       | 6.75                                       | 6,000                       |
| White rhino      | 1.78                                      | 3.85                                       | 2,300                       |
| Zebra            | 1.28                                      | 2.32                                       | 280                         |
| Lion             | 1.2                                       | 2.1                                        | 195                         |
| Brown hyena      | 0.75                                      | 1.18                                       | 48                          |
| Hippopotamus     | 1.5                                       | 4.2                                        | 2,400                       |
| Topi             | 1.15                                      | 1.78                                       | 118                         |
| Leopard          | 0.63                                      | 1.45                                       | 50                          |
| Giraffe          | 5.3                                       | 4.25                                       | 1,516                       |