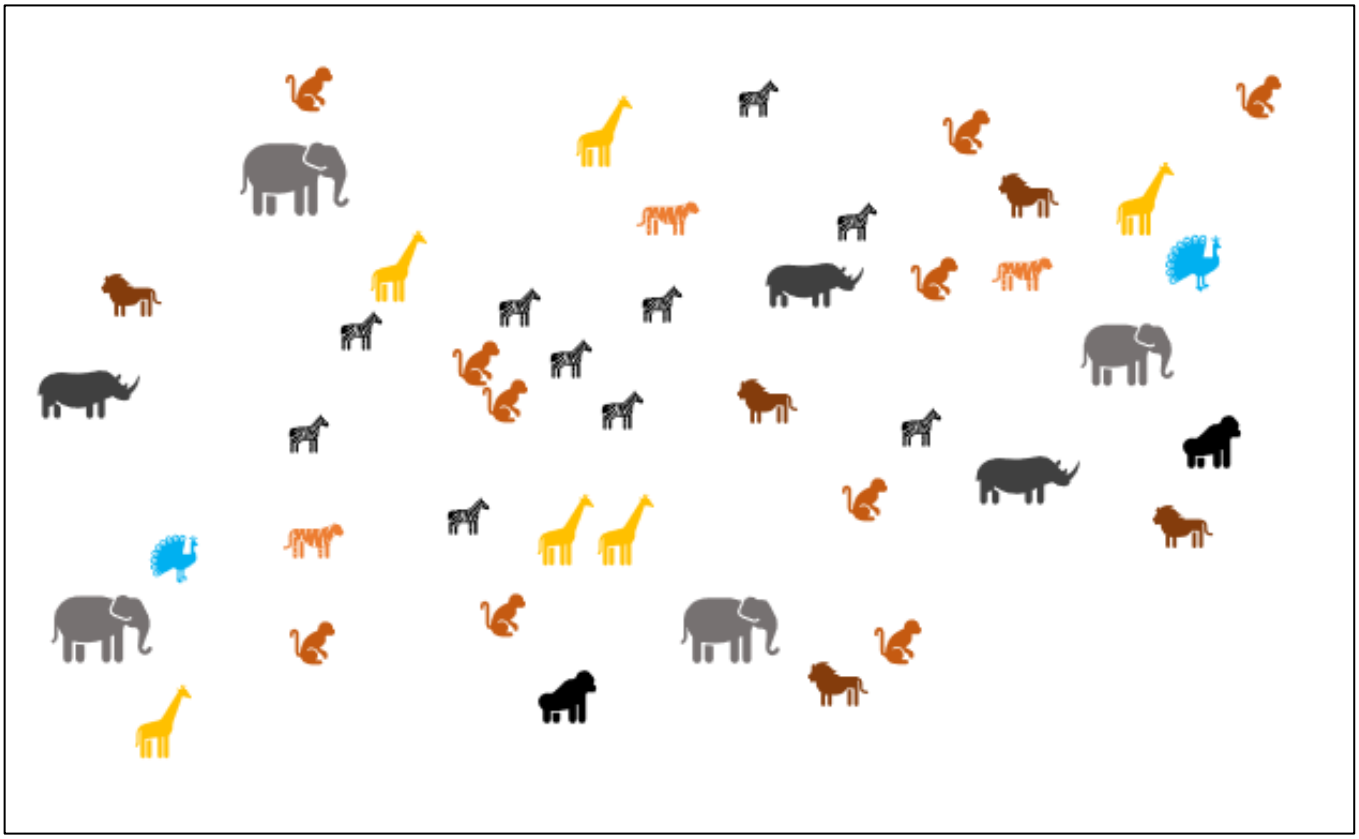
Problem of the Week: Week 1 (Sum2): Year 7: Statistics

Construct and interpret appropriate tables, charts and diagrams including:

- frequency tables, bar charts and pictograms for categorical data
- pie charts for categorical data
- vertical line (or bar) charts for ungrouped numerical data



Safari Park Census

The keepers at a safari park need to count up all the animals every year in a census.

After feeding time, someone left all the gates open and the animals all escaped and mingled together.

- Count up and group all the animals
- You might like to use the table on the next page.

Animal	Image	**Tally**	**Frequency**
Zebra		~~1111~~ ~~1111~~	10
Lion		~~1111~~	5
Tiger		111	3
Peacock		11	2
Giraffe		~~1111~~ 1	6
Elephant		1111	4
Rhino		111	3
Monkey		~~1111~~ ~~1111~~	10
Gorilla		11	2
Total			45

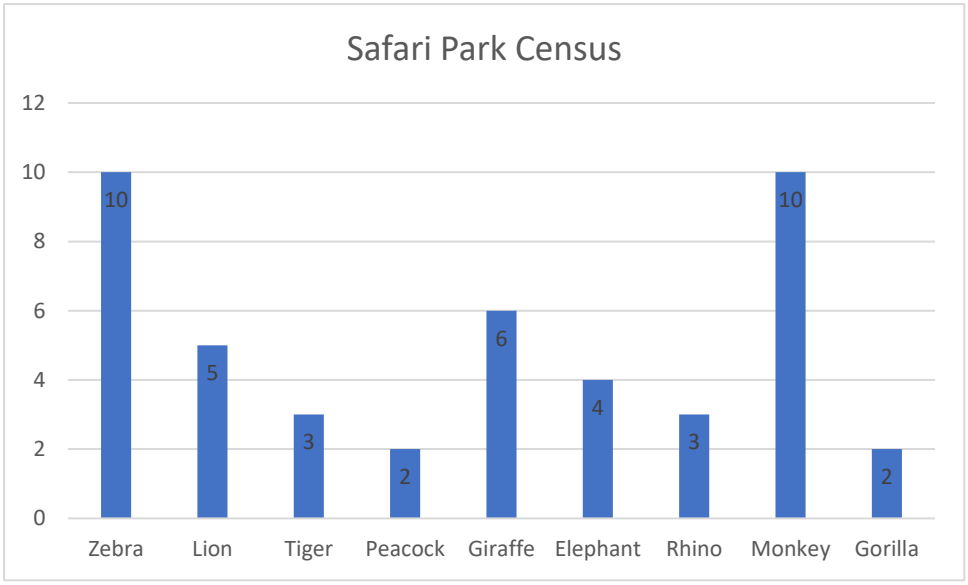
Show this data as a bar chart, a pictogram and a pie chart.

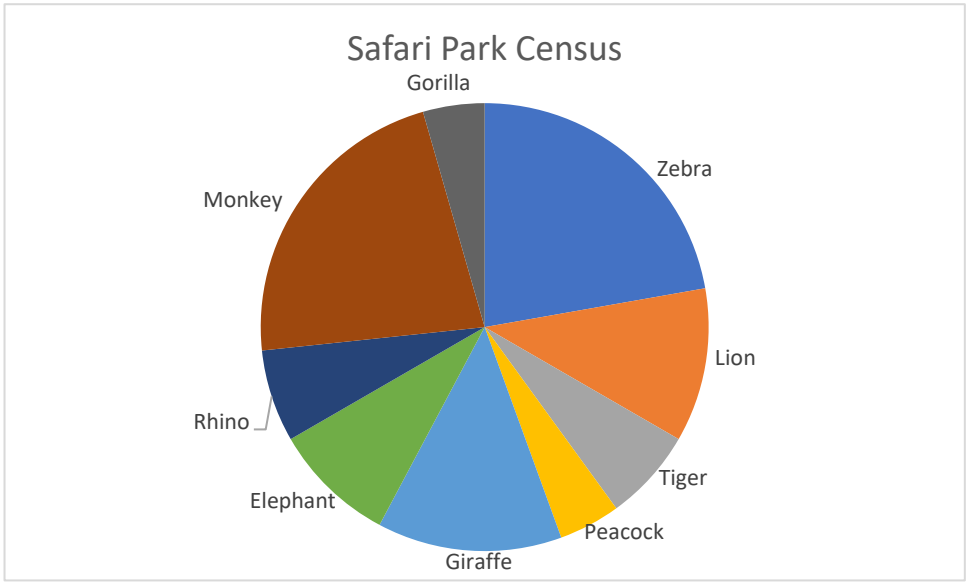
Decide which one you prefer as a way of helping the keepers with their census and explain why.

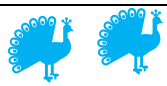
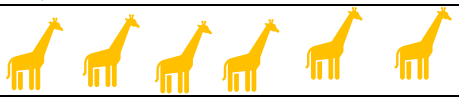
For the pie chart, there are 45 animals to share between 360°

360 ÷ 45 = 8° per animal, so 10 animals = 10 x 8 = 80° on the pie chart

Animal	Frequency	Degrees
Zebra	10	80
Lion	5	40
Tiger	3	24
Peacock	2	16
Giraffe	6	48
Elephant	4	32
Rhino	3	24
Monkey	10	80
Gorilla	2	16
	45	360


Safari Park Census
12
10
8
6
4
2
0
10
5
3
2
6
4
3
10
2
Zebra
Lion
Tiger
Peacock
Giraffe
Elephant
Rhino
Monkey
Gorilla


Safari Park Census
Gorilla
Zebra
Monkey
Lion
Rhino
Tiger
Elephant
Peacock
Giraffe

Zebra	
Lion	
Tiger	
Peacock	
Giraffe	
Elephant	
Rhino	
Monkey	
Gorilla	

Key: One image = one animal (can you think of a better one ?)