

DATA HANDLING

Check List

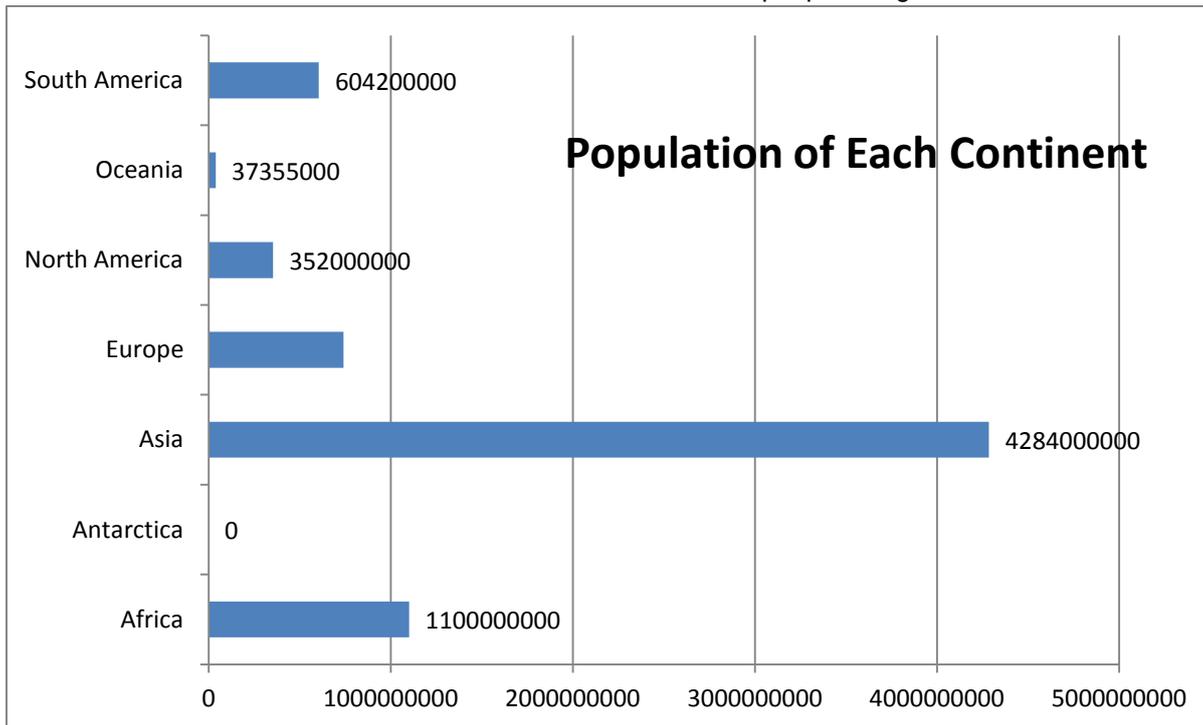
Make sure you

- can draw and identify the different types of graphs
- are able to read and interpret data from graphs and tables
- can calculate and interpret different averages, quartiles, percentiles and ranges
- can read and interpret information from a box and whisker plot

Exam Questions

Question 1

Consider the data below which illustrates the various number of people living on the 7 continents.



- 1.1 Which continent currently has the greatest population? (1)
- 1.2 How many people live in North America? (1)
- 1.3 How many people are citizens of Antarctica? (1)
- 1.4 Write the population of Asia in words. (2)
- 1.5 From the graph above, estimate the current population of Europe. Give your answer to the nearest million. (2)
- 1.6 How many more people live in Africa compared to Oceania? (3)

Question 2

A study shows the actual birth and death rate for South Africa and its neighboring countries. Each figure shows how often a death or a birth takes place in that country. Please note that all figures have been rounded to the nearest 30 seconds.

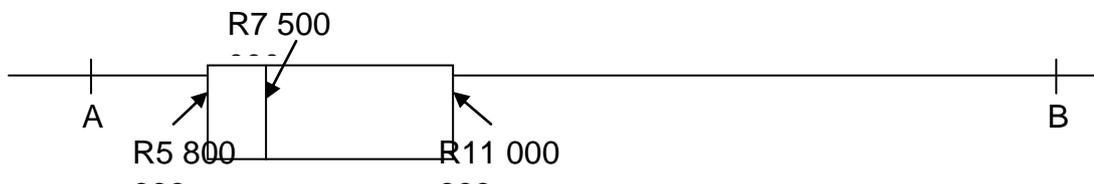
COUNTRY	A Person dies every....	A baby is born every
South Africa	30 seconds	30 seconds
Namibia	19 minutes	11,5 minutes
Botswana	28,5 minutes	11,5 minutes
Zimbabwe	3 minutes	1,5 minutes
Mozambique	1 minute	30 seconds



- 2.1 How often is a baby born in Mozambique? (1)
- 2.2 On a set of axes, draw an appropriate bar graph showing the various birth and death rates of each country. Your graph needs to be correctly labeled (11)
- 2.3 According to the table above, a birth takes place every 30 seconds and a death also takes place every 30 seconds in South Africa.
- 2.3.1 If this were the case, what would be happening to the population of South Africa? (2)
- 2.3.2 According to "Statistics South Africa", the population in the country is actually increasing. Why is this not reflected in the table above? (2)

Question 3

Pam Golding estate agents pride themselves on selling elite and expensive homes. On the 2nd April they had 36 houses for sale in the Bryanston / Sandton area. The Box-and-Whisker Plot below gives a summary of the prices of these homes, the cheapest selling for R2 950 000 and the most expensive selling for R55 000 000



- 3.1 What is the value of A on the plot above? (1)
- 3.2 Determine the range of the price of houses in this area which are being sold by Pam Golding Estate Agents? (2)
- 3.3 The value of R7 500 000 can be called by two different names on the box-and-whisker plot above. What are these names? (2)
- 3.4 How many houses were more expensive than R11 00 000? (3)
- 3.5 Calculate the inter-quartile range. (3)
- 3.6 What does the inter-quartile range indicate to someone wanting to buy a house in the Bryanston / Sandton area? (2)

Question 4

Consider the percentile graph on the next page which indicates the height and weight percentiles of females living in South Africa who age aged from two to twenty years of age. Use this graph to answer the following:

- 4.1 4.1.1 How heavy is is a 14 year old girl who lies on the 25th percentile? (2)
- 4.1.2 Explain what the 25th percentile means in this situation. (2)
- 4.1.3 How tall would this same 14 year old be if she was on the 90th percentile? (2)
- 4.1.4 Describe what this 14-year old girl would look like if you saw her in the street with reference to her height and build. (2)
- 4.2 A group of 5 year olds are standing in a crowd. Explain (with reasons) if you would easily notice a 5 year old girl who is 1,15m tall? (3)



Height and weight percentile chart 2 to 20 years

