STRONG TOWER ACADEMY MATHS LESSON NOTE FOR JS ONE

DATE: 11th MAY, 2020

TOPICS: GRAPHICAL REPRESENTATION OF DATA

SUB-TOPICS: PIE CHART.

OBJECTIVES: At the end of the lessons, Students should be able to:

- 1. explain bar chart
- 2. represent data on a bar chart.

INTRODUCTION:

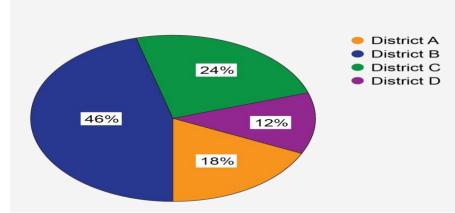
BAR CHART

A **Pie Chart** is a circle that is divided into sections, so that it looks like a pie and cut into slices. The whole pie chart stands for the total amount of data.

A **Pie Chart** is a circle that is divided into sectors, with each sector showing the size of one category of the data.

EXAMPLE: READING INFORMATION FROM PIE CHARTS

The following pie chart shows the amount of drinking water from one water purification plant that was used in four different districts in Nigeria in January 2018.



- 1. Which district used the most water?
- 2. Which district used the least water?
- 3. What is the difference in the percentage of the district that used the most drinking water and the district that used the least?

4

The key for the pie chart is the list of districts at the right-hand side. The colour for each district in the key corresponds with the colour used for the pie chart sector for that district.

1. Step 1: To find the most water used, you need to find the highest percentage on the pie chart. You will see that this is also the biggest slice. Then check in the key which name corresponds with the colour of that sector.

The largest slice and percentage is 46%. This sector is blue, so it is for District B.

Answer: District B used the most water.

2. Step 2: Find the smallest percentage on the pie chart.

The smallest slice and percentage is 12%. This sector is purple, so it is for District D.

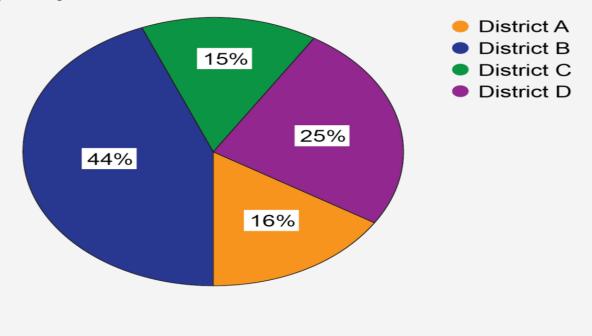
Answer: District D used the least water.

3. Step 3: For question 3 you need to do a calculation to get the answer. You have found the percentages for the most and least water used in Steps 1 and 2. Now calculate the difference between the percentages.

Difference in percentage between Most and Least water used = 46–12=34%

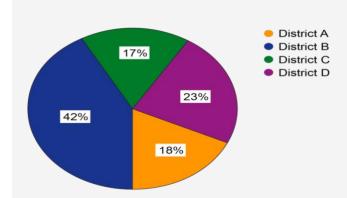
TEST EXERCISE: READ INFORMATION FROM THIS PIE CHARTS

1. In Nigeria in March 2019, the education department calculated the total number of Junior Secondary students in four districts. The pie chart provided shows a comparison in percentages of the numbers of JS students in the four districts.



- a. Which district has the most students?
- b. Which district has the fewest students?
- c. What is the difference in the percentage between the district with the most students and the district with the fewest students?

2. After the last district elections, statistics were published on what percentage of the adult population who qualified to vote actually voted in the election. This is called the voter turnout. The pie chart below shows these percentages for four districts.



- a. In which district was the voter turnout the best?
- b. In which districts was the voter turnout the worst?
- c. Where should the authorities carry out voter education, based on the information provided on this pie chart?