

# SHARP

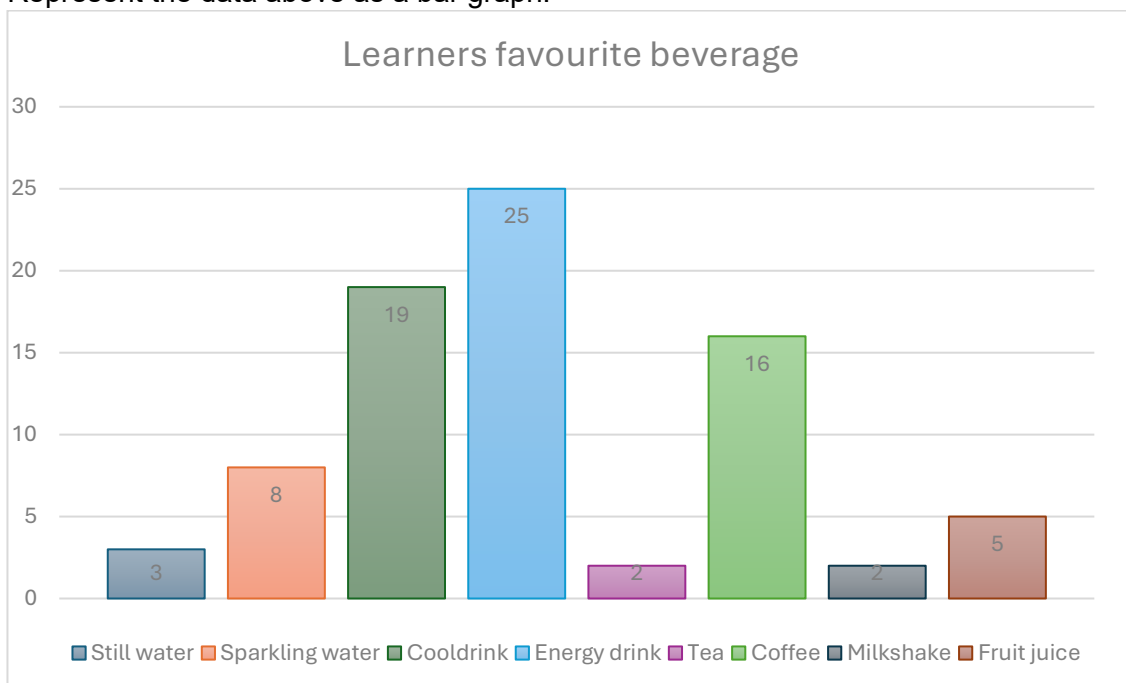
## Worksheet 19 Memorandum: Representing Data

### Grade 8 Mathematics

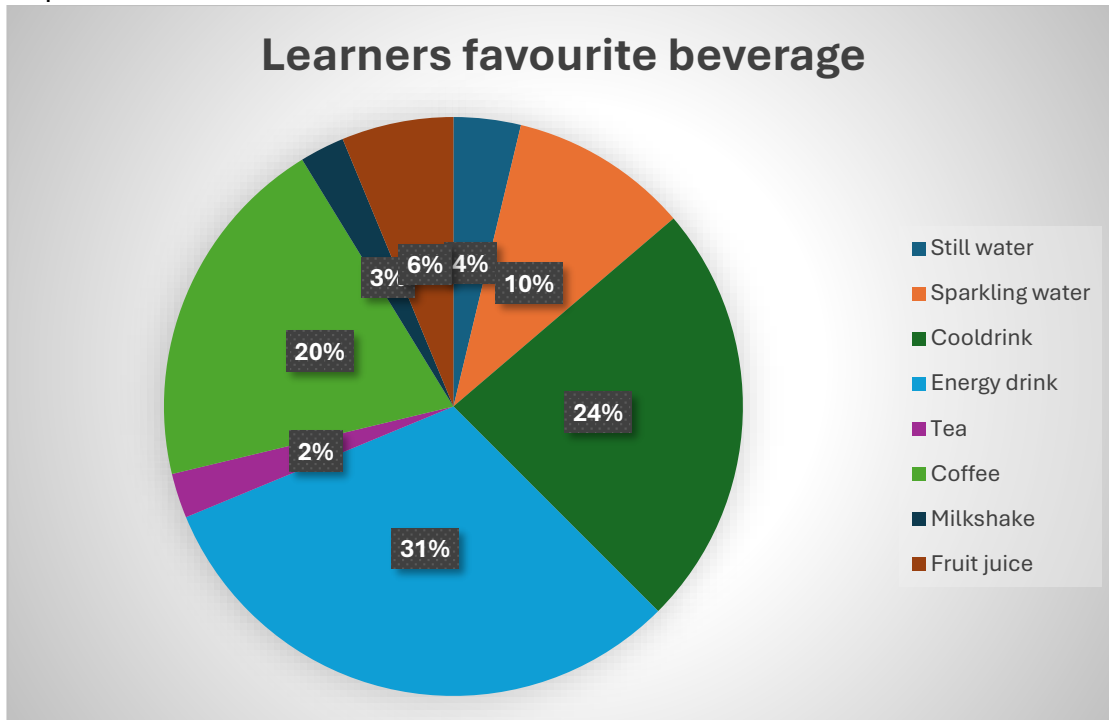
Learners were asked in a survey, to choose their favorite beverage. The results are as follows:

Still water	Sparkling water	Cooldrink	Energy drink
3	8	19	25
Tea	Coffee	Milkshake	Fruit juice
2	16	2	5

1) Represent the data above as a bar graph.



2) Represent the data above in a Pie-chart.



3) Explain the difference between a bar graph and a histogram.

A bar graph represents discrete categorical data and a histogram represents continuous grouped data.

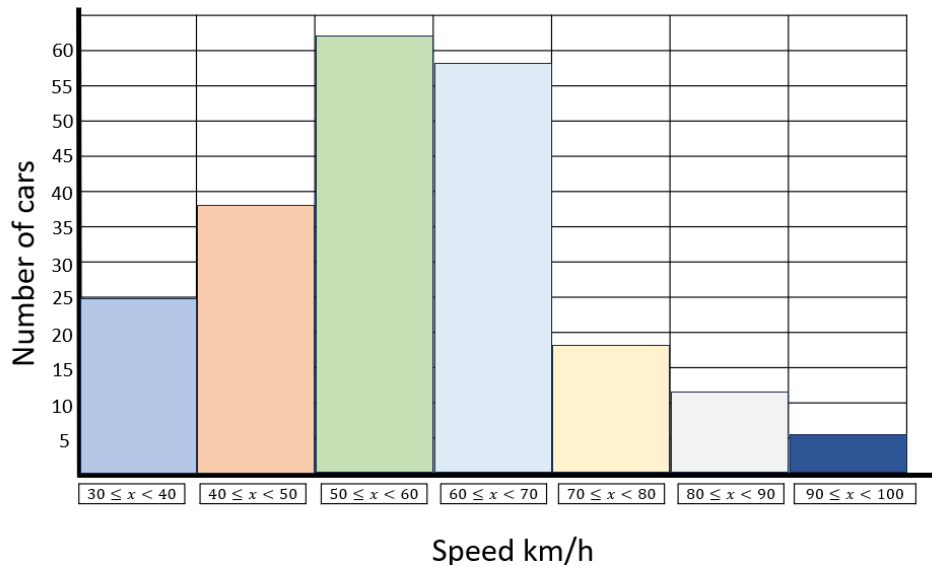
4) Based on the data, what do you think the speed outside the school is?

The speed is 60km/h based on the data, as a majority of cars are found between the range of 50 -60 km/h

5) If 60km/h is the speed limit, what percentage of drivers went over the speed limit?

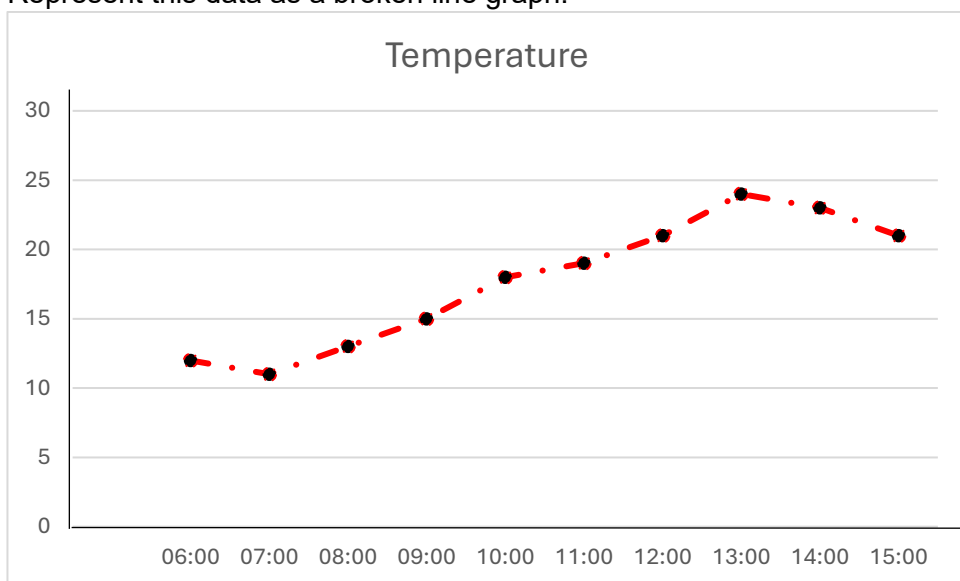
$$\begin{aligned}
 &= \frac{94}{219} \times 100 \\
 &= 42,92\%
 \end{aligned}$$

6) Represent this data as a histogram.



A group of learners went on a 9-hour hike in the Drakensberg Mountains. They recorded the temperature hourly during their hike.

7) Represent this data as a broken line graph.



8) The following answers are suggested:

The hikers can take a break at 10:30 this would be the halfway in terms of the time they hiked for.

The hikers can take a break at the halfway point in terms of the distance they hike.

The hikers can stop for lunch at 12:00 and after lunch make their way back.