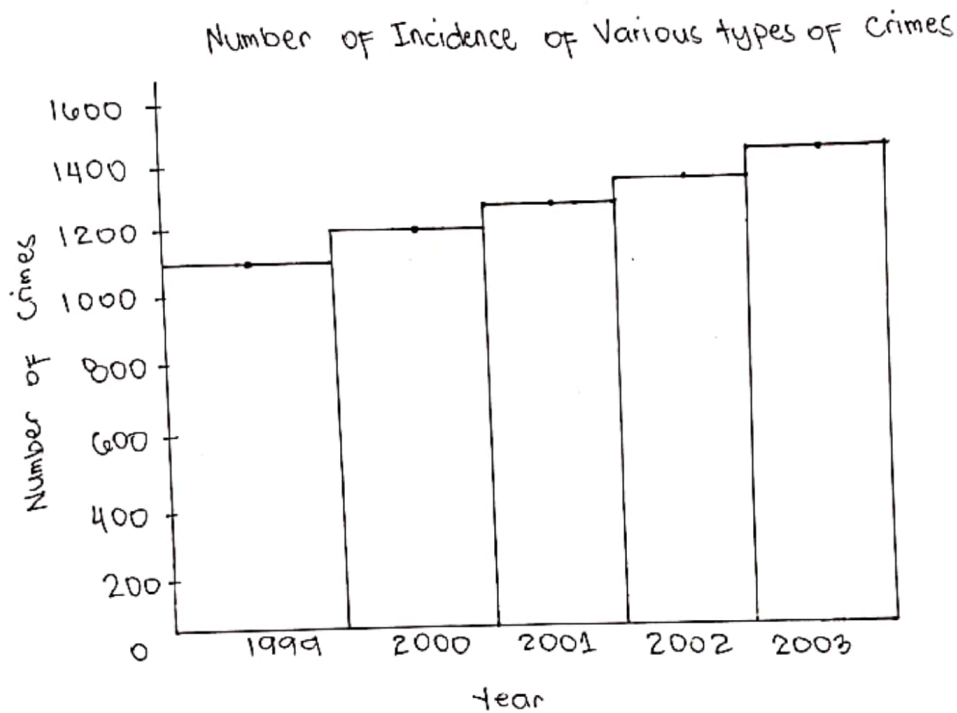


PROGRESS CHECK

- ① The table below represents the number of incidence of various types of crimes for the town of Thompson. construct a histogram to represent the data.

Year	1999	2000	2001	2002	2003
No. of crimes	1109	1200	1287	1350	1443

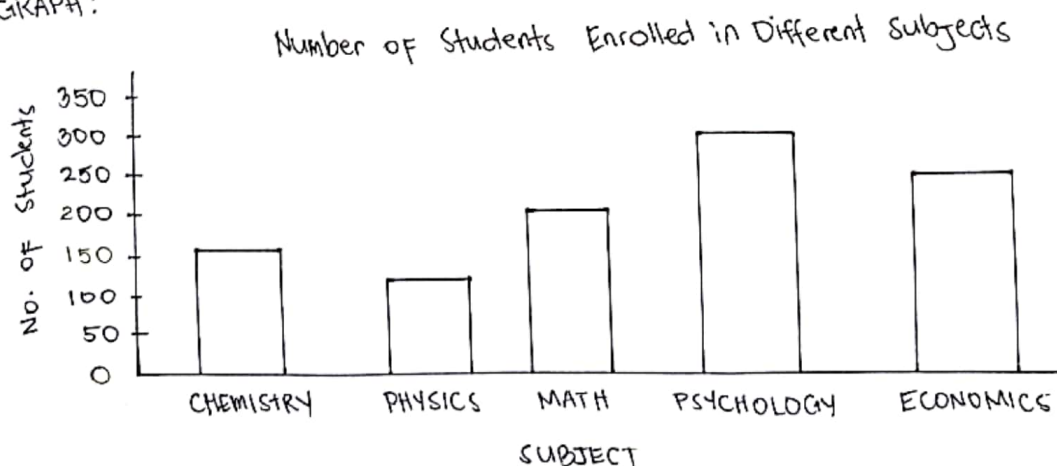
HISTOGRAM:



- ② The following data was collected about which introductory courses first year university students take. Draw a bar graph to represent the data.

Course	chemistry	Physics	Math	Psychology	Economics
No. of students	195	120	200	300	250

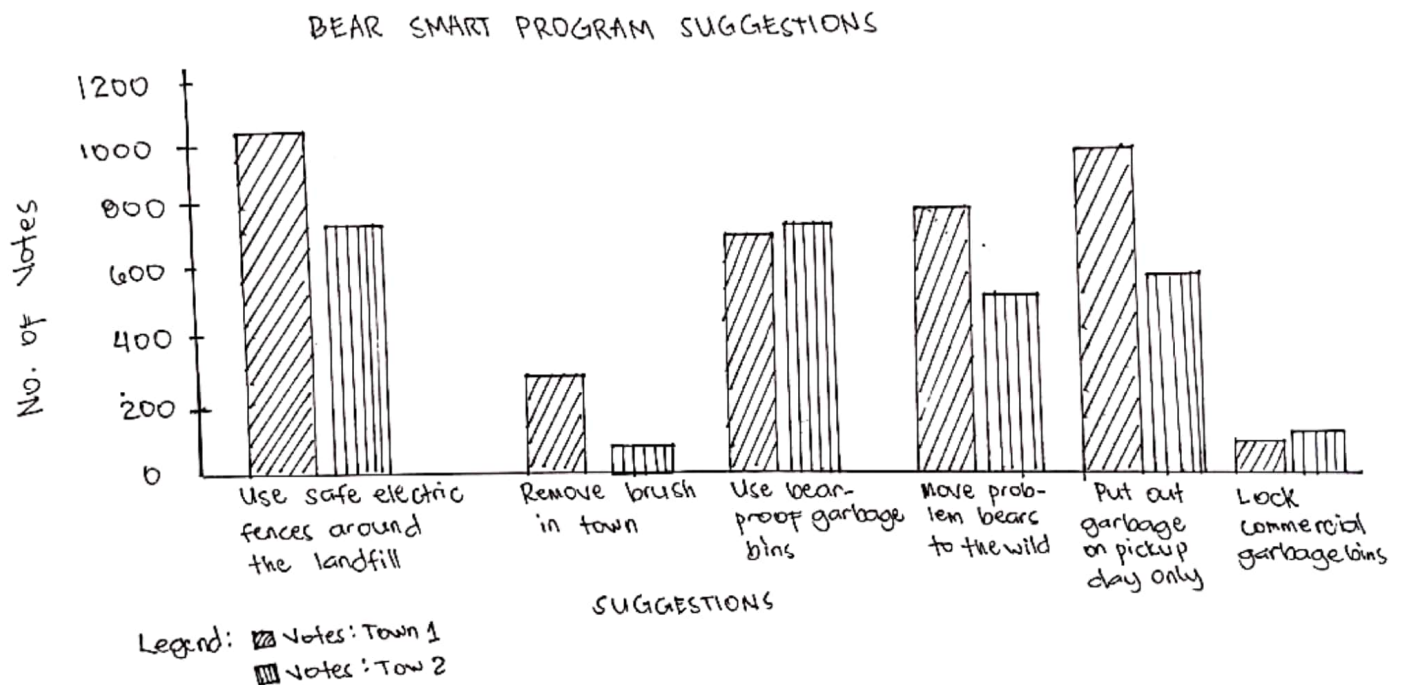
BAR GRAPH:



- ③ Town councils in two towns conducted a survey to determine how people feel about the different options for protecting the bears that live in the area but still keep the community safe. The results are shown below; create a bar graph to represent this data.

Bear Smart Program		
Suggestions	Votes: Town 1	Votes: Town 2
Use safe electric fences around the landfill	1020	711
Remove brush in town	294	47
Use bear-proof garbage bins	701	710
Move problem bears to the wild	773	479
Put out garbage on pick-up day only	948	518
Lock commercial garbage bins	60	76

BAR GRAPH:



- ④ Complete the chart and then create a pie graph that represents the data.

Pet	Number	Percentage	Angle/ Degrees in the pie
without Pet	420	42%	151.2°
Dog	240	24%	86.4°
Cat	200	20%	72°
Bird	50	5%	18°
other	90	9%	32.4°
Total	1000	100%	360°

Given: Without pets = 420
 Dog = 240
 Cat = 200
 Bird = 50
 Other = 90

Solutions:

$$\text{Total no. of Pets} = (420 + 240 + 200 + 50 + 90) \\ = 1000 \text{ pets}$$

For percentage:

$$\text{Without pets} = \frac{\text{No. of pets}}{\text{Total No. of pets}} \times 100 \\ = \frac{420}{1000} \times 100 \\ = 42\%$$

$$\text{Dogs} = \frac{\text{No. of pets}}{\text{Total No. of pets}} \times 100 \\ = \frac{240}{1000} \times 100 \\ = 24\%$$

$$\text{Other} = \frac{\text{No. of pets}}{\text{Total No. of pets}} \times 100 \\ = \frac{90}{1000} \times 100 \\ = 9\%$$

$$\text{Cat} = \frac{\text{No. of pets}}{\text{Total No. of pets}} \times 100 \\ = \frac{200}{1000} \times 100 \\ = 20\%$$

$$\text{Bird} = \frac{\text{No. of pets}}{\text{Total no. of pets}} \times 100 \\ = \frac{50}{1000} \times 100 \\ = 5\%$$

For angle/degree:

$$\text{Formula: } \frac{\text{No. of pets}}{\text{Total of pets}} \times 360^\circ$$

$$\text{For without pets} = \frac{420}{1000} \times 360^\circ \\ = 151.2^\circ$$

$$\text{For Dog} = \frac{240}{1000} \times 360^\circ \\ = 86.4^\circ$$

$$\text{For Cat} = \frac{200}{1000} \times 360^\circ \\ = 72^\circ$$

$$\text{For Bird} = \frac{50}{1000} \times 360^\circ \\ = 18^\circ$$

$$\text{Other} = \frac{90}{1000} \times 360^\circ \\ = 32.4^\circ$$

PIE GRAPH:

Legend:

- Without pets
- Dogs
- Cats
- Bird
- Others

PERCENTAGE OF PETS

