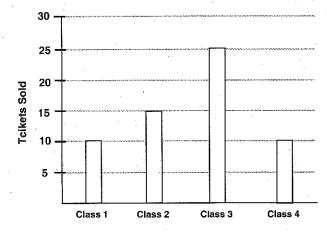
## PDM6-16: Choosing and Interpreting Graphs



## Answer the following questions in your notebook.

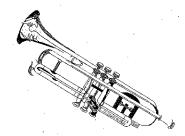
1.	Test #	1	2	3	4	5	6	7	- 8	9	10	11	12
	Score	68	73	75	82	78	75	78	78	83	86	93	91

- a) Draw a stem and leaf plot and a broken line graph for Sonya's math scores.
- b) Answer the following questions and say which graph you used to find the answer.
  - i) On how many tests did she score between 78 and 88?
  - ii) What mark did she score most often?
  - iii) Did her mark tend to increase or decrease throughout the year?
  - iv) After which tests did her mark decrease?
  - v) What was her highest score?
- 2. Concert Ticket Sales in Katia's Grade



- a) How many tickets did Katia's grade sell altogether?
- b) On average, how many tickets did each class sell?

c)  $\frac{2}{3}$  of the tickets sold were adult tickets. How many adult tickets were sold?



- d) Adult tickets sell for \$5.00 and children's tickets sell for \$2.00.
  Calculate the total value of the tickets sold.
- e) The money from the school concert is going toward a grade-wide trip. The trip costs \$300.
  - i) How much more money is needed?
  - ii) How many adult tickets would have to be sold to cover the remaining cost?

Match each type of graph with its purpose. The first one has been done for you.

Line Graph .

Compares two sets of data.

Stem and Leaf Plot

Shows a trend in data or makes predictions (usually used when graphing change over time).

Double Bar Graph

Shows the frequency of results and trends clearly.

Bar Graph

Shows whether one type of data increases, decreases

or neither when another type of data increases.

Scatter Plot

Makes it easy to see the largest, smallest and most common data values.

- Choose and draw an appropriate type of graph to represent each set of data. Explain your choice.
- a) Age and weekly allowance of different people.

Age	10	12	11	8	12	9	8	10	13	13	9	12	11	8	13
Monthly Allowance (\$)	40	80	50	10	100	75	20	30	60	70	30	20	60	30	90

b) Thickness of rulers produced by a company (in tenths of a mm).

t 2 3 4 5 8 7 8

28 29 31 30 28 27 24 31 31 30 31 30 29 29 28 26 32 33 30 28

Which scatter plot best represents the relationship between height of people and their shoe size? Explain.

