

SOL Alignment and Levels of Cognitive Demand Grade 3

STANDARD 3.17

The student will

- a) collect and organize data, using observations, measurements, surveys, or experiments;
 - b) construct a line plot, a picture graph, or a bar graph to represent the data; and
 - c) read and interpret the data represented in line plots, bar graphs, and picture graphs and write a sentence analyzing the data.
- Construct a line plot with no more than 30 data points.
 - Read, interpret and analyze information from line plots by writing at least one statement.
 - Label each axis on a bar graph and give the bar graph a title. Limit increments on the numerical axis to whole numbers representing multiples of 1, 2, 5, or 10.
 - Read the information presented on a simple bar or picture graph (e.g., the title, the categories, the description of the two axes).
 - Analyze and interpret information from picture and bar graphs, with up to 30 data points and up to 8 categories, by writing at least one sentence.
 - Describe the categories of data and the data as a whole (e.g., data were collected on four ways to cook or prepare eggs — scrambled, fried, hard boiled, and egg salad — eaten by students).
 - Identify parts of the data that have special characteristics, including categories with the greatest, the least, or the same (e.g., most students prefer scrambled eggs).
 - Select a correct interpretation of a graph from a set of interpretations of the graph, where one is correct and the remaining are incorrect. For example, a bar graph containing data on four ways to cook or prepare eggs — eaten by students show that more students prefer scrambled eggs. A correct answer response, if given, would be that more students prefer scrambled eggs than any other way to cook or prepare eggs.

Problem:	Alignment to standard: Yes/no	Level of cognitive demand: Low/medium/not aligned	Answer and EKS correlation:
1	No		This is a line graph, not a line plot (line graphs are addressed in SOL 4.20)
2	Yes; c	Low	6; bullet 5
3	Yes; c	Low	C; bullet 5
4	Yes; c	Low	43; bullet 5
5	Yes; c	Medium	First, second, fourth, fifth; bullet 5
6	Yes; b	Low	Create bar graph with 4 bars – first bar-3, second-8, third- 12 and fourth- 7; bullet 8
7	Yes; c	Medium	d; bullet 5
8	Yes; c	Low	2; bullet 5