Math Grade 6 D

Grade Level Standard(s):

KY.6.SP.5

Materials:

• Math 6 D Attainment Task Questions for Student Use

Response Code:

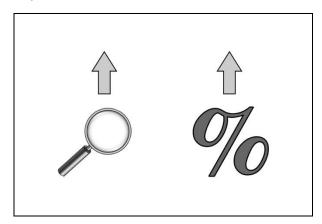
• Indicate the answer provided by the student.

Text Coding:

- "Quotation marks" indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis () are optional; they may replace or be read in addition to the word(s) immediately preceding.

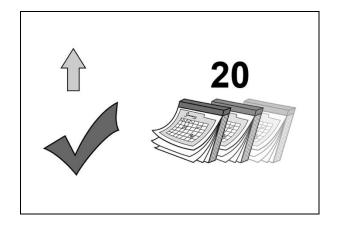
a.

Because larger numbers of observations create a more accurate statistical representation.



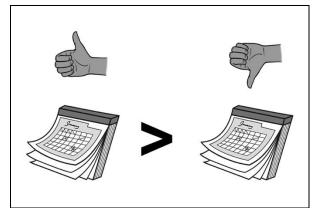
b.

Because he wants to report the highest scores he finds in a twenty-year period.



C.

Because he knows that the golf team used to play better than they did this year.



Math Grade 6 D

Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 9 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, "We are about to start the task, and I am going to ask you some questions."

All questions from this task are available for presentation to the student in the material <u>Math 6 D Attainment Task Questions for Student Use.</u>

"Horatio is keeping the team stats. He's been asked to describe the team's performance. Horatio comments that he could say more statistically, about the team, if he considered all of the grades and the data from the twenty years the school has had a golf team."

2. "Why does Horatio say this?"

Response Option	Response Rationale	
a. Because larger numbers of observations create a more accurate statistical representation. (Correct)	The student correctly applies a conceptual understanding to explain why more data permits more statistical accuracy.	
b. Because he wants to report the highest scores he finds in a twenty-year period.	The student applies some conceptual understanding of statistics but misinterprets the reason for gathering more data.	
c. Because he knows that the golf team used to play better than they did this year.	The student applies some conceptual understanding of statistics but misinterprets the reason for gathering more data.	
Depth of Knowledge (DOK) 3		

Math 6 D Attainment Task Questions for Student Use

2. Why does Horatio say this?

Math Grade 6 D

Kentucky Academic Standard: KY.6.SP.5 - Summarize numerical data sets in relation to their context, such as by

- a. Reporting the number of observations.
- b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
- c. Determining quantitative measures of center (median and/or mean) to describe the distribution of numerical data.
- d. Describing distributions of numerical data qualitatively relating to shape (using terms such as cluster, mode(s), gap, symmetric, uniform, skewed-left, skewed-right and the presence of outliers) and quantitatively relating to spread/variability (using terms such as range and interquartile range).
- e. Relating the choice of measures of center and variability to the shape of the data distribution. MP.3, MP.7

Alternate Assessment Target:

- a. Limit to reporting observations
- b. Limit to describing the nature of attributes
- c. Limit to determining quantitative measures of center (mean, median, mode)
- d. Limit to spread/variability (range)
- e. Excluded from assessment

Student Group	Number of Students*	Percent Correct #2
All Students	605	26.28%
Gender		
Female	216	28.24%
Male	389	25.19%
Ethnicity		
African American	72	26.39%
American Indian or Alaska Native	<10	Not Reported
Asian	<10	Not Reported
Hispanic of Latino	63	25.40%
Native Hawaiian of Pacific		
Islander	<10	Not Reported
White (Non-Hispanic)	419	25.78%
Two or More Races	42	30.95%
English Learner	42	28.57%
Economically Disadvantaged	454	27.09%

^{*}Number of students that attempted the item