

# \_\_\_\_\_

Scientist: \_\_\_\_\_

*Keyp*

+ \_\_\_\_\_

# QPOEE Quiz #2 over Mean, Median, Mode, Range, Outlier

Date: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ HR: \_\_\_\_\_

15

Success Criteria: Communicate patterns in data using mean, median, mode, range, outliers, etc.

Directions: Calculate the mean, median, mode, range, and outlier of the data collected for bean plant height, in centimeters:

**10 cm, 12 cm, 13 cm, 6 cm, 10 cm, 33 cm, 12 cm, 3 cm, 7cm, 12 cm, 3 cm, 11 cm**

Using the data, above, explain or show how you found each answer. (1 point each)	Your answers (1 point each)
1.) Show how you found the <u>mean</u> of the set of data, above? $10 + 12 + 13 + 5 + 11 + 33 + 12 + 3 + 7 + 12 + 3 + 11 = 132 \div 12 = 11$	<u>mean</u> → 2.) <u>11 cm</u> Did you remember to label your answer?
3.) How did you find the <u>median</u> of the data, above? $10 + 11 = 21 \div 2 = 10.5$ 3, 3, 6, 7, <u>10, 11</u> , 12, 12, 12, 13, 33	<u>median</u> → 4.) <u>10.5 cm</u>
5.) Using WORDS, describe how you found the <u>mode</u> of the data, above? <i>Twelve occurs 3 times, which is more than any other number shows up in this set of data</i>	<u>mode</u> → 6.) <u>12 cm</u>
7.) How did you find the <u>range</u> of the data, above? $33 - 3 = 30$ $33 \leftarrow$ highest value $-3 \leftarrow$ lowest value $30 \leftarrow$ difference	<u>range</u> → 8.) <u>30 cm</u>
Does this data have an <u>outlier</u> ? Circle yes or no, in the box to the right. 9.) Explain your reasoning. <i>33 is unlike any other value in this set of data</i>	(Circle one.) <u>outlier</u> → 10.) <input checked="" type="radio"/> Yes <input type="radio"/> No If so, what is it? <u>33 cm</u> If not, leave answer blank.

**Directions:** Read the definition and write the vocabulary term that it describes next to it, on the right, below.

Definition	Vocabulary Term
The numbers that 'lie outside' most of the other values in the set.	11. <u>outlier</u>
The middle value of the data in numerical order.	12. <u>median</u>
The difference between the largest and smallest values from the data.	13. <u>range</u>
The numerical value that occurs most often in the data.	14. <u>mode</u>
The average of all of the data collected.	15. <u>mean</u>