Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Accuracy and Precision Practice

1. A student is given a rock that is known to have a mass of 436.8 grams. She measures the mass of the rock three different times with the following results: 460.9 grams, 460.4 grams , 459.8 grams. What can be said about her precision and accuracy?

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1. A student is given a cube of metal that is known to have a mass of 125 grams. She measures the mass of the metal three different times with the following results: 124.7 grams, 125.2 grams, 124.8 grams. What can be said about his precision and accuracy?

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1. A student builds a parachute and times the drop from 50 ft. Why is it important to do this more than one time?

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1. The student drops the parachute 5 times, recording the following times: 5.2 sec, 5.4 sec., 5.0 sec., 5.4 sec., 5.25 sec. What can be said about this student’s results?

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1. A student wants to determine which type of bat (wood or metal) will hit a ball farthest. Here are the results of the experiment:

|  |  |  |  |
| --- | --- | --- | --- |
| Wood | 135 ft. | 57 ft. | 180 ft. |
| Metal | 175 ft. | 173 ft. | 174 ft. |

What questions do you have about this student’s results?

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What would you encourage this student to do next and why?

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