Name _____ Period _____ Date _____

ACCURACY AND PRECISION

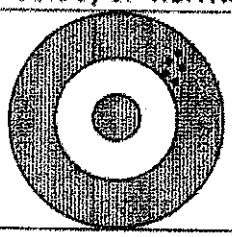
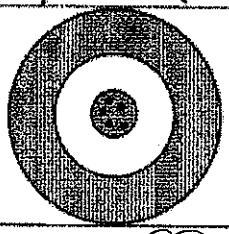
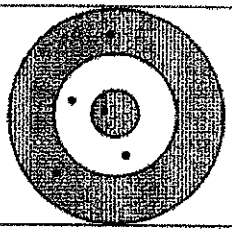
Definitions:

Accuracy - how close a measurement is to the actual value

Precision - how close a measurement is to each other

Precision versus Accuracy:

Look at each target and decide whether the "hits" are accurate, precise, both accurate and precise, or neither accurate nor precise: (Note: An accurate "hit" is a bulls eye!)

		
Accurate?: Yes / (No) Precise?: (Yes) / No	Accurate?: (Yes) / No Precise?: (Yes) / No	Accurate?: Yes / No Precise?: Yes / (No)

Comparing Values: Which is more Precise?

a. 56.2 inches (to the tenths)

b. 47.23 inches (to the hundredths)

c. 24 inches (whole numbers only)

The more decimal places, the more precise.

Answer choice B is **most precise** because it has the most decimal places.

1. Which measurement is most precise?

   a. 44.4 grams b. 25.2 grams (c.) 98.23 grams

   Which measurement is least precise?

   (a.) 52 months b. 50.2 months c. 50.5 months

2. A basketball player throws free-throws; 95 of these balls go through the goal; 5 miss the goal entirely. Describe the precision and accuracy of the FT's.

   Accurate, 95% of time

3. The same player is having an off day; 5 balls go through the goal; 5 miss the goal entirely. Describe the accuracy and precision now.

   Not as accurate (50%)
   Not precise (50%)