

Name: _____

- 1) Science investigators initially use classification systems to
 - A) make more accurate inferences
 - B) organize their observations in a meaningful way
 - C) make direct comparisons with standard units of measurement
 - D) extend their powers of observation
- 2) Which statement about a major hurricane is an inference?
 - A) Damage from the storm is expected to be extensive.
 - B) The windspeed is measured at 200 km/hr.
 - C) The central air pressure is recorded at 946.0 mb.
 - D) A rain gauge records three inches of rain in less than one hour.
- 3) Which statement *best* illustrates a classification system?

A) A glacier melts at the rate of one meter per year.	C) Stars are grouped according to their color.
B) Snowfall predictions for winter storms vary.	D) Ocean depths are measured by using sonar.
- 4) A group of students observed and measured various characteristics of a stream for one day. Which statement about the stream is most likely an inference?
 - A) The water level of the stream will rise after the next rainfall.
 - B) The stream water is dark brown.
 - C) The velocity of the stream is greatest near the outside of a meander.
 - D) The stream's depth is different at various distances from the streambank.
- 5) Which action can be performed most accurately using only the human senses?
 - A) measuring the air pressure of a room
 - B) counting 28 shells from a beach
 - C) adding 10 grams of salt to a cup of water
 - D) tearing a sheet of paper into squares whose sides measure 1 centimeter
- 6) An interpretation based upon an observation is called

A) a measurement	B) a classification	C) an inference	D) a fact
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- 7) The grouping of objects or events based on similar characteristics is called

A) measurement	B) interpretation	C) observation	D) classification
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- 8) A classification system is based on the use of
 - A) inferences to make observations
 - B) instruments to observe properties of objects
 - C) the human senses to observe properties of objects
 - D) observed properties to group objects with similar characteristics
- 9) Scientists often use classification systems in order to
 - A) extend their powers of observation
 - B) make more accurate interpretations
 - C) organize their observations in a meaningful way
 - D) make direct comparisons with standard units of measurement
- 10) Which statement about a cumulus cloud seen over Syracuse, N.Y., is an inference?
 - A) The cloud has an irregular shape.
 - B) The base of the cloud is determined to be 2.6 km above ground.
 - C) The cloud appears white.
 - D) The cloud formed over Lake Ontario.
- 11) Using a ruler to measure the length of a stick is an example of
 - A) calculating the percent of error by using a proportion
 - B) measuring the rate of change of the stick by making inferences
 - C) extending the sense of sight by using an instrument
 - D) predicting the length of the stick by guessing