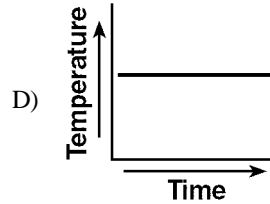
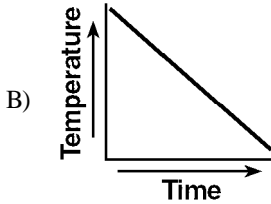
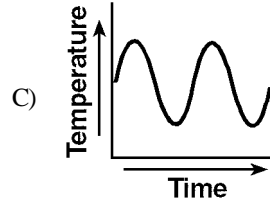
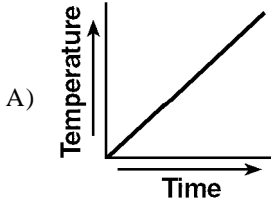
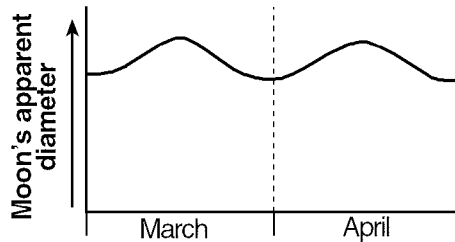


Name: _____

- 1) The *best* example of a noncyclic event is
- A) an apparent star movement
 - B) a change of seasons
 - C) a phase change of the Moon
 - D) a volcanic eruption
- 2) Which graph most likely illustrates a cyclic change?



- 3) An observer on the Earth measured and recorded the slight changes in the apparent diameter of the Moon for 2 months. A graph of the data is shown below.



- Which statement *best* explains the observations?
- A) The distance from the Earth to the Moon varies in a cyclic manner.
 - B) The Earth revolves around the Moon each month.
 - C) The apparent diameter of the Moon is always greatest at the new-moon phase.
 - D) The Moon actually increases and decreases in size each month.

Questions 4 and 5 refer to the following:

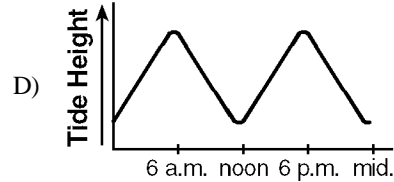
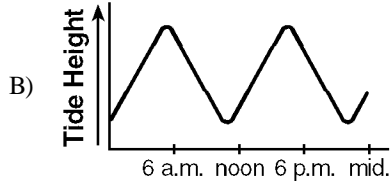
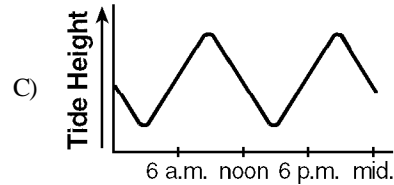
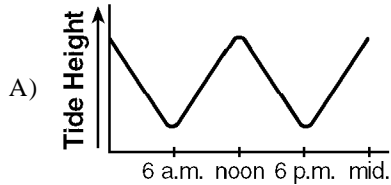
The Bay of Fundy, located on the east coast of Canada, has the highest ocean tides in the world. The St. John River enters the Bay of Fundy at the city of St. John, where the river actually reverses direction twice a day at high tides. Data for the famous Reversing Falls of the St. John River are given below for high and low tides on June 26 through 28, 1994.

Tidal Record for Reversing Falls, St. John River

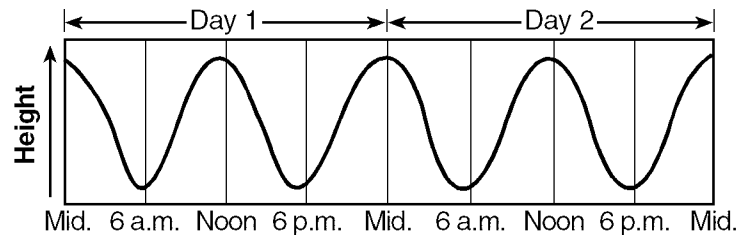
Date	Time of First High Tide	Time of First Low Tide	Time of Second High Tide	Time of Second Low Tide
June 26	2:25 a.m.	8:45 a.m.	2:55 p.m.	9:05 p.m.
June 27	3:15 a.m.	9:35 a.m.	3:45 p.m.	9:55 p.m.
June 28	4:05 a.m.	10:25 a.m.	4:35 p.m.	10:45 p.m.

- 4) Tides in the Bay of Fundy are *best* described as
- A) predictable and noncyclic
 - B) unpredictable and cyclic
 - C) unpredictable and noncyclic
 - D) predictable and cyclic

- 5) Which graph *best* represents the tides recorded on June 28?



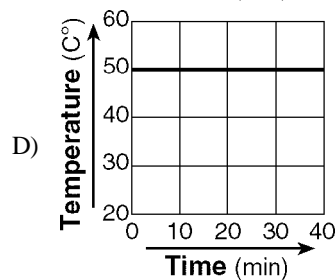
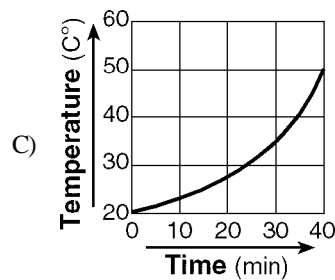
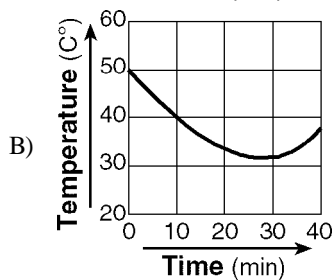
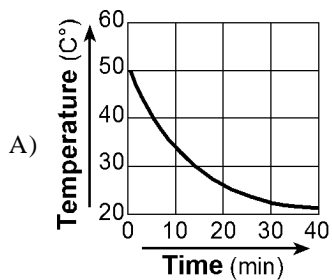
- 6) The graph below shows the changes in height of ocean water over the course of 2 days at one Earth location.



Which statement concerning these changes is *best* supported by the graph?

- A) The changes are cyclic and occur at predictable time interval
 B) The changes are noncyclic and may occur at any time.
 C) The changes are noncyclic and occur at sunrise and sunset.
 D) The changes are cyclic and occur at the same time every day.
- 7) Which measurement, taken daily at a specific New York State location, will usually change the *least* number of degrees over a period of 2 months?
 A) direction toward sunrise
 B) air temperature
 C) direction toward magnetic north
 D) altitude of the Sun at noon
- 8) What always happens when a change occurs?
 A) The temperature of a system increases.
 B) The properties of a system are altered.
 C) Dynamic equilibrium is reached.
 D) Pollution is produced.
- 9) The Earth process whose rate of change is *easiest* to measure is the
 A) development of mature soil
 B) formation of a rock
 C) discharge of a stream
 D) erosion of a mountain
- 10) Which event would be the *most* predictable one year in advance of the event?
 A) an earthquake in California
 B) a hurricane in Florida
 C) an eclipse of the Sun
 D) a volcanic eruption in Japan
- 11) As viewed from Earth, the Sun's apparent diameter has shown which type of change over a period of 10 years?
 A) cyclic and predictable
 B) noncyclic and unpredictable
 C) noncyclic and predictable
 D) cyclic and unpredictable
- 12) As viewed from the Earth, the Moon's phases have shown which type of changes over the past 50 years?
 A) noncyclic and unpredictable
 B) cyclic and predictable
 C) cyclic and unpredictable
 D) noncyclic and predictable

- 13) A beaker of water at 50°C is placed in a room where the air temperature is 20°C. Which graph *best* represents the change in the water temperature?



- 14) The rising and setting of the Sun are examples of

A) noncyclic events
 B) predictable changes
 C) unrelated events
 D) random motion

- 15) Which condition exists when the rates of water flowing into and out of a lake are balanced so that the lake's depth appears to be constant?

A) transpiration
 B) hydration
 C) saturation
 D) equilibrium