

Name: \_\_\_\_\_

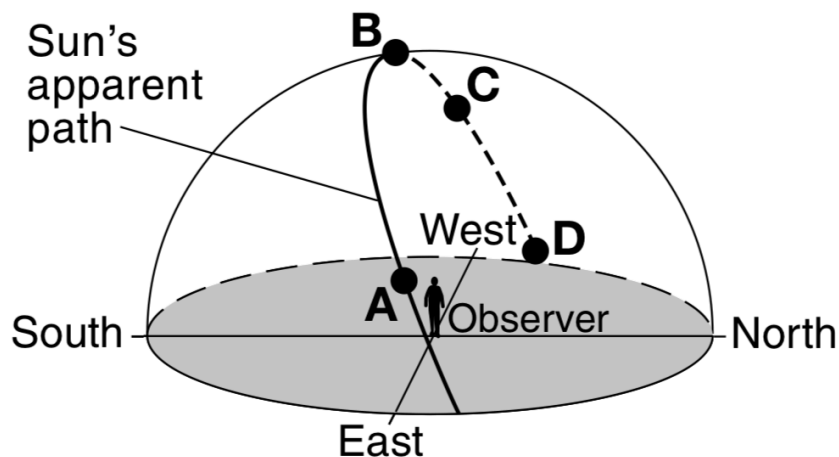
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## Worksheet: Apparent Motions I

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Base your answers to questions 1 through 3 on the diagram below and on your knowledge of Earth science. The diagram represents the apparent path of the Sun through the sky as viewed by an observer in the Northern Hemisphere. Points A, B, C, and D represent four positions of the Sun.



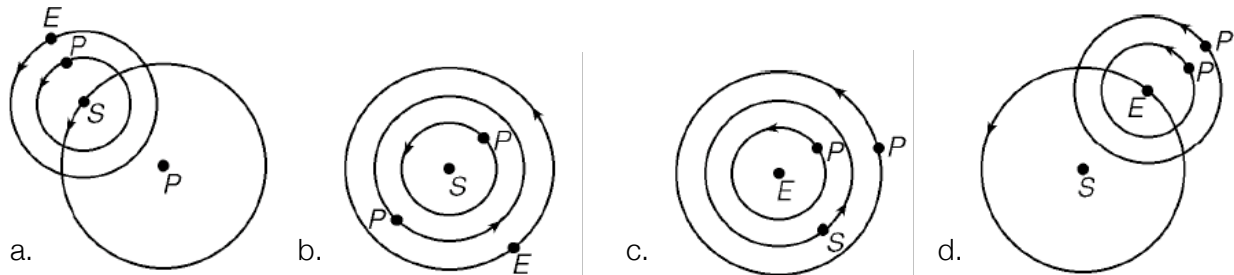
1. This apparent path of the Sun through the sky is caused by
  - a. Earth's revolution around the Sun
  - b. Earth's rotation on its axis
  - c. the Sun's revolution around Earth
  - d. the Sun's rotation on its axis
2. The observer has the longest shadow when the Sun is at position
  - a. A
  - b. B
  - c. C
  - d. D
3. What is the approximate time of day when the Sun is at position C?
  - a. 6 a.m.
  - b. 9 a.m.
  - c. 3 p.m.
  - d. 6 p.m.
4. During which month does the Sun rise north of due east in New York State?
  - a. February
  - b. July
  - c. October
  - d. December

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5. The length of time that daylight is received at a location during one day is called the location's
- intensity of insolation
  - angle of insolation
  - eccentricity of insolation
  - duration of insolation
6. Which diagram best represents a geocentric model of the solar system? [Diagrams are not drawn to scale.] KEY: E = Earth; P = Planet; S = Sun



7. As seen from New York State, the noon Sun is
- never directly overhead
  - directly overhead every day
  - directly overhead on the first day of spring and fall
  - directly overhead only on the first day of summer
8. Which statement best describes the geocentric model of our solar system?
- All planets revolve around the Sun.
  - The Earth is located at the center of the model.
  - All planets except the Earth revolve around the Sun.
  - The Sun is located at the center of the model.
9. In New York State, which day has the shortest period of daylight?
- December 21
  - March 21
  - September 21
  - June 21
10. In New York State, which day has the longest period of daylight?
- December 21
  - March 21
  - September 21
  - June 21