

Name: _____

Date: _____ Period: _____

Worksheet: Actual Motions I

1. On the Earth, a freely swinging pendulum gradually shows a change in the direction of its swing. This change is evidence that the Earth
 - a. is an orbiting natural satellite
 - b. revolves around the Sun
 - c. rotates on its axis
 - d. has an elliptical orbit

2. The orbiting motion of the Earth is best described as
 - a. inclination
 - b. revolution
 - c. rotation
 - d. declination

3. The day of the year, as units of time, are based upon motions of
 - a. the Moon
 - b. the Earth
 - c. the Sun
 - d. the Stars

4. Which is the best evidence for the Earth's rotation?
 - a. the rising of the Sun
 - b. the motion of a Foucault pendulum
 - c. the changing of the seasons
 - d. the phases of the Moon

5. The Coriolis effect provides evidence that the Earth
 - a. revolves around the Sun
 - b. rotates on its axis
 - c. has a magnetic field

6. The predictable changes in the direction of swing of a Foucault pendulum would be influenced most by a change in the Earth's
 - a. angle of tilt
 - b. intensity of insolation
 - c. rate of rotation
 - d. period of revolution

7. Which observation can not be explained by a geocentric model?
 - a. A freely swinging pendulum appears to change direction.
 - b. A planet's apparent diameter varies.
 - c. The Sun's path through the sky is an arc.
 - d. Stars follow circular paths around Polaris.

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8. Which planetary model allows a scientist to predict the exact positions of the planets in the night sky over many years?
- a. The planets' orbits are circles in a heliocentric model.
 - b. The planets' orbits are ellipses in a geocentric model.
 - c. The planets' orbits are ellipses in a heliocentric model.
 - d. The planets' orbits are circles in a geocentric model.
9. In New York State, which day has the shortest period of daylight?
- a. December 21
 - b. March 21
 - c. September 21
 - d. June 21
10. Which statement best explains the apparent daily motion of the stars around Polaris?
- a. The Earth revolves around the Sun.
 - b. The Earth has the shape of an oblate spheroid.
 - c. The Earth rotates on its axis.
 - d. The Earth's orbit is an ellipse.