

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

Date: \_\_\_\_\_



# GENIUSCHALLENGE

## EARTH'S ORBIT AND ROTATION

1. How long does it take the Earth to rotate on its axis? \_\_\_\_\_

2. Why do we have a leap year every four years?

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3. True or false: Earth's orbit around the sun is what causes night and day. \_\_\_\_\_

4. What causes the length of shadows to change over the course of the day?

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5. True or false: all constellations are visible from the Earth each night. \_\_\_\_\_

6. List two observations that would lead you to believe that the Earth rotates on its axis.

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7. What kind of instrument, developed by Leon Foucault, provides physical evidence that Earth is rotating on its axis? \_\_\_\_\_

8. Fill in the blank using the word **the same as** or **different than**.

Other planets, such as Mars and Jupiter, have year-lengths that are \_\_\_\_\_  
the length of a year on Earth.

9. If it is 9 am in San Francisco, is it also 9 am in New York? Why or why not?

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10. A sundial uses patterns of what to tell time?

a. sunny days

b. shadows

c. clouds

d. stars