

Directions: Use the information in the table and a calculator to answer the following questions.

| Facts About the Moon | |
|---|---|
| Diameter at the equator: 3,476 km | Period of rotation: about 27.3 Earth days |
| Circumference at the equator: 10,920 km | Period of revolution around Earth: about 27.3 days |
| Density: 3.3 g/cm ³ | Length of day and night: about 15 Earth days each |
| Gravity: 1/6 of Earth's | Temperature: high: 127°C daytime low: -170°C nighttime |
| Distance from the Earth: closest: 356,400 km farthest: 406,700 km average: 384,400 km | Atmosphere: almost none |

- 1. Earth's circumference at the equator is 39,843 km. How many times larger is Earth's circumference than the Moon's circumference?
- 2. How many times will the Moon revolve around Earth in 92 days?
- 3. How many times will the Moon rotate on its axis in 92 days?_____
- **4.** If a rock has a mass of 0.15 kg on the Moon, what will its mass be on Earth? _____
- 5. If a space colonist weighs 800.1 N on Earth, what would the colonist weigh on the Moon?
- 6. Use the average distance to the Moon to answer this question. If astronauts travel to the Moon and back to Earth again in 144 hours, how many kilometers per hour do they travel?
- 7. If the space colonists travel at 6,000 km/h, how long will it take them to get to the Moon from Earth when the Moon is at its farthest point from Earth? Its nearest point to Earth? Round your answers to the nearest hour.
- 8. With the extremes of temperatures on the Moon, what would a Moon colony need to protect people from the temperatures?