

Grand Tour of the Solar System

Earth, Sun, Moon & the Solar System

Name: _____ Date: _____

Circle the best answer for 1 and 2. Answer 3 in complete sentences.

1. Which list shows the planets in order from the Sun?

- (A) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune
- (B) Mercury, Earth, Venus, Mars, Saturn, Jupiter, Neptune, Uranus
- (C) Venus, Mercury, Earth, Mars, Jupiter, Uranus, Saturn, Neptune
- (D) Earth, Mars, Venus, Mercury, Jupiter, Saturn, Uranus, Neptune

2. How long does it take Earth to orbit the Sun?

- (A) 24 hours
- (B) 29.5 days
- (C) About 365 days
- (D) 165 years

Read: A student measured a stick's shadow in Indianapolis: 9:00 a.m. = 80 cm pointing west. 12:30 p.m. = 30 cm pointing north. 4:00 p.m. = 75 cm pointing east.

3. What explains the changes in the shadow's length and direction? Use the data.

Use Claim-Evidence-Reasoning: Claim, Evidence, Reasoning.

Grand Tour of the Solar System: Exit Ticket

Total: 5 points. Mastery: 4 or more.

#	Answer	Points
1	(A) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune	1 point
2	(C) About 365 days	1 point
3	Claim: The shadow changed because Earth rotates, so the Sun's position in the sky changed. Evidence: The shadow was 80 cm at 9:00 a.m., 30 cm at 12:30 p.m., and 75 cm at 4:00 p.m. Reasoning: When the Sun is low in the morning and evening, shadows are long and point away from it (west, then east). At midday the Sun is highest, so the shadow is shortest.	3 points: Claim: Earth's rotation changes the Sun's position; Evidence: cites lengths and directions; Reasoning: low Sun = long shadow; shadows point away from the Sun.