Answer Key

- I. C
- 2. B
- 3. Observations, Problem, Hypothesis, Experiment, Conclusion, Results
- 4. B
- 5. B
- 6. 0, 1, 1, 0, 1, 0, 0, 1
- 7. Scientific method
- 8. observations
- 9. problem
- 10. hypothesis
- II. Guess, prediction
- 12. experiment
- 13. data
- 14. conclusion
- 15. results

Identifying the Phases of the Moon II - Key

Using the table above, write the phase of the moon shown in the picture.			
	Waning Gibbous	Waning Crescent	
	New Moon	First Quarter	
	Last/3 rd Quarter	Full Moon	
	Waxing Crescent	Waxing Gibbous	

Identifying Phases of the Moon III - Key

Which image shows First Quarter? 4 Full? 7 Third Quarter? 10

Which images are crescents? 1,2,3, 11,12 gibbous? 5,6,8,9

Which images are waxing? 1 through 6

Which images are waning? 8 through 12

Identifying Phases of the Moon IV - Key



A
Phase:
Full Moon
Order: 5



Phase: Waxing Crescent Order: 2



B
Phase: Last/3rd
Quarter
Order: 7



Phase: Waning Crescent Order: 8



C
Phase:
Waning
Gibbous
Order: 6



Phase: New Moon Order: 1



D
Phase:
Waxing
Gibbous
Order: 4



H
Phase: First
Quarter
Order: 3

Matching Moon Phases - Key

- ${\it C}$ or ${\it J}$ 1. The Moon is almost directly between the Sun and Earth (start of cycle).
- $m{C}$ or $m{J}$ 2. The Moon is almost directly between the Sun and Earth (cycles starts again.
- D 3. A bit of the Sunlit side of the Moon shows, with the Sunlit side being on the right.
- **B** 4. Two weeks have passed since the new Moon. We see the entire face of the Moon shining.
- **6**5. The Moon is three-quarters of its way around Earth.
- *E* 6. The Moon is a quarter of its way around Earth.
- F7. A bit of the Sunlit side of the Moon shows with the light side being on the left.
- A or I 8. The Moon is between full Moon and last quarter
- H9. The Moon is increasing in light between a first quarter Moon and a full Moon.
- A or I 10. The Moon is decreasing in light between a full Moon and a last quarter Moon.

Lunacy Worksheet - Key

1. Lunar forces inspire unusual behavior or influence the course of history on Earth.

b. False

2. Most of the major events of our time did not happen during a Full Moon.

a. True

- 3. According to astronomers and historians, a full Moon causing bad things to happen is pure coincidence.
- 4. A full Moon occurs for about one minute.
- 5. List three Moon facts.

Answers should include three facts from this list.

- The Moon is believed to be 4.6 billion years old, the same age as the Earth.
- C It has no atmosphere or water.
- (It is comprised of a rocky material that is heavily scarred with craters from meteorite impacts.
- **The same side is permanently turned toward Earth.**
- The gravitational forces between the Earth and the Moon generate two ocean high tides per day.
- The word "lunatic" comes from the notion that the Moon's forces could make a person go crazy.
- The Moon is moving away from the Earth at a rate of 3.8 centimeters each year. When it formed, the Moon was about 14,000 miles from Earth; now it's about 240,000 miles away.
- 6. During which month is the Moon called the Wolf Moon?

January

7. During which month is the Moon called the Harvest Moon?

February

8. During which month is the Moon called the Storm or Worm Moon?

March

- 9. Lists the phase of the Moon for the following events:
 - a. Boston Tea Party; New Moon
 - b. Declaration of Independence: Waning Gibbous
 - c. End of the Civil War: Waning Gibbous
 - d. President Abraham Lincoln assassinated: Waning Gibbous