Topic: Moons of our Solar System

Teacher Information

Time Allowance

50 minutes

Background

During the Mars mission, students will be constructing the motherboard of a probe that will be launched to one of the Martian moons: Phobos or Deimos. The moons in our solar system vary in size, shape, and chemical content and in many other ways. This activity serves as a brief introduction to the many moons that are part of our local group of planets.

Materials

student data log access to resource materials: Internet library/media center

Preparation

1. Locate the answers to questions before the students begin. The information that is gathered in this exercise is constantly changing.

Procedures

- 2. Assign each student a research partner.
- 3. Allow the students access to resources including the media center/library and/or the Internet.



Answer Key

1. Which planets have moons? Do any planets have more than one moon or none at all? Record your findings in the table below.

Planet	Number of Moons
1. Mercury	0
2. Venus	0
3. Earth	1
4. Mars	2
5. Jupiter	60
6. Saturn	31
7. Uranus	27
8. Neptune	13
9. Pluto	3

IMPORTANT:

Astronomers are still discovering moons around the planets. Some of these answers may need to be updated.

2. How many moons are in our solar system?

137

3. How long does it take the Earth's moon to make one orbit?

27.32

4. Who is credited with the discovery of 4 of Neptune's moons and 9 of Uranus'?

Voyager 2

5. Which of the moons takes the longest amount of time to make one orbit around its planet? (Name the moon, its planet and its revolution period.)

Sinope, Jupiter, 758 days (retrograde)

6. Which of the moons is the largest in diameter? (Name the moon, its planet and its measurement(s).)

Ganymede, Jupiter, 5,268 km

7. Which of Jupiter's moons is the smallest in diameter? (Name the moon and give its measurement.)

Leda, Jupiter, 8 km

8. In general, how would you describe the shape of the majority of the moons found in our solar system?

odd shaped, not spherical (other various answers)

10. various answers will be given