

Write your notes
about what you are
reading in this space.

Science Shorts -8

Our Closest Neighbor

For thousands of years, people on earth have sat and watched the moon change from a tiny sliver in the sky to a large glowing ball. Early man soon realized that the period of time between one full moon and the next was always the same – twenty-nine and one half days. What people of ancient times didn't know is that moonlight is really sunlight reflected off the surface of the moon.

Space experts have placed many satellites in orbit around the earth. Most of those are used to relay information to weather forecasters or to send television signals. Earth's only natural satellite, though, is the moon. While the earth moves around the sun the moon moves around the earth.

Our curiosity about nature's nightlight has led to several lunar missions by astronauts. Astronomers knew a great deal about the moon even before the first flight blasted off. They knew that the moon is only two hundred fifty thousand miles away from earth – closer than any other star or planet- and can be reached by rocket in only sixty-nine hours. They also knew that the moon is about one fourth the size of earth and that objects there are much lighter than they are on earth.

On July 20, 1969, Neil Armstrong became the first human being to set foot on the moon. Armstrong, in his space suit, weighed only fifty-eight pounds on the moon. That computes to three hundred forty-eight pounds on earth. Without his suit, Colonel Armstrong would have melted. With no atmosphere to protect it from the sun's heat the side of the moon facing the sun is two hundred sixty degrees. On the night side of the moon, the temperature is two hundred eighty degrees below zero!

Armstrong was able to hop across the dusty surface like a kangaroo as he collected rock samples. Even with all the jumping and digging that day, Neil never made a sound. There is no air on the moon to carry sound waves, so it will always be silent. And with no wind or water to erase them, the astronaut's footprints will remain where they are forever.

Neil Armstrong and other astronauts who traveled to the moon after him have brought about eight hundred forty pounds of moon rock samples back to earth. However, during those missions, the astronauts have also left tons of junk including litter, lunar landers and three moon buggies. That's not very neighborly, is it?

Directions: There are many numbers in this reading passage. Find the units from the reading and place them in the correct space then draw a line to what each number represents.

	Number	Unit
1.	840	Pounds
2.	29 ½	
3.	250,000	
4.	69	
5.	-280	
6.	58	
7.	+260	
8.	348	

What it represents

- How much Neil Armstrong weighed on the moon
- Amount of time between full moons
- Time it takes to travel to the moon
- Amount of rock brought back from the moon by astronauts
- The temperature on the day side of the moon
- How much Neil Armstrong weighed on the Earth
- The temperature on the night side of the moon
- How far away the moon is from the Earth

The United States sent the first astronaut to the moon, but another country was the first to put a satellite in space. The answer to this puzzle will tell you the name of that country. Use the clues to find the words from the story. Then, keeping the boxed letters in the order they appear, place them in the Secret Word Box.

1. There is no _____ on the moon, so there is no sound. _ _ _
2. The moon's surface is _____. _ _ _ _ _
3. Astronauts' _____ will remain on the moon forever. _ _ _ _ _ _ _ _
4. moon flights lunar _ _ _ _ _
5. 1st moon walker _ _ _
6. Rock _____ were brought back from the moon. _ _ _ _ _ _ _

Secret Word Box

_ _ _ _ _

(first country to put a satellite in space)