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SPACE

EXPLORERS™

Hands on Astronomy & Space Sciences Workshops

Lunar Settlement

Educational Resource

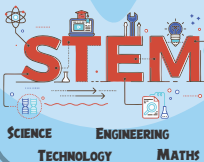
Humans have always had an innate desire to explore beyond the boundaries of the Earth. Moon is our nearest neighbour and the next likely frontier for human settlement. However, there are many technological, societal, and safety-related issues with space travel that need to be addressed. Students take the role of scientists and take on the challenge of building a colony on the Moon.

SPACE EXPLORERS WORKSHOP

PROVIDES A
UNIQUE
LEARNING
EXPERIENCE



PROMOTES
STEM
EDUCATION



OFFERS
HANDS - ON
ACTIVITIES



INSTILLS
21ST
(CENTURY
SKILLS

Social awareness Technology
Leadership Innovation
Critical Thinking Adaptability
Collaboration Communication
Creativity Analytic thinking
Problem solving Imagination

CHALLENGE YOURSELF

Q1 Find solutions to problems that will be encountered while settling on the Moon.

**MATCH
IT**

- | | |
|------------------------------------|--|
| 1 Absence of habitable environment | a Produce water by combining hydrogen from soil and oxygen from greenhouse |
| 2 Absence of food | b Build a dome to maintain temperature, pressure and to save us from harmful space environment |
| 3 Absence of liquid water | c Grow plants in a greenhouse |
| 4 Absence of air | d Use satellite network and antennas to communicate |
| 5 No electricity | e Produce oxygen by mining lunar rocks |
| 6 No communication | f Build solar farms using materials available on Moon |

Q2 Circle the letter that best answers the question or statement.



1. If a person weighs 60 kg on Earth, he will weigh 10 kg on Moon.

✓a. 10

b. 60

c. 6

2. The difference between the surface temperature of the Moon during the day and the surface temperature of the Moon at night is about 250.

a. About 50° C

✓b. About 250° C

c. About 100° C

3. A Moon day is equal to approximately 27 Earth days.

a. 100

✓b. 27

c. 60

4. Moon has craters because of comet/asteroid impact.

✓a. Comet/Asteroid impacts

b. Soil erosion

c. Dust storms

5. Living on a mountain peak is not a good choice for lunar settlement?

a. Underground

b. Inside a crater

✓c. On a mountain peak

6. Aitken Basin is the largest crater on the Moon.

a. Shackleton Crater

b. Tycho Crater

✓c. Aitken Basin