

TRAVELING-TO-MARS STATION

Note to Parents: Please read the directions, the question, and each statement to your child.

Student Name: _____

Directions for Students: Place a check (✓) in the blank space if you think the statement is true.

What are some things that are true about preparing for and traveling to Mars?

✓ if Yes

- ___ A space shuttle needs to travel at a high speed to leave Earth's atmosphere.
- ___ Mars is far way, but it is only the next farthest planet from the Sun after Earth in our Solar System.
- ___ Astronauts don't sleep while in outer space because there are no beds.
- ___ Astronauts experience weightlessness in outer space.
- ___ The flight path from Earth to Mars is simple, straight, and quick.
- ___ The flight path from Earth to Mars is a curved path because both planets are in orbit around the Sun.



HOVERCRAFT STATION

Note to Parents: Please read the directions, the question, and each statement to your child.

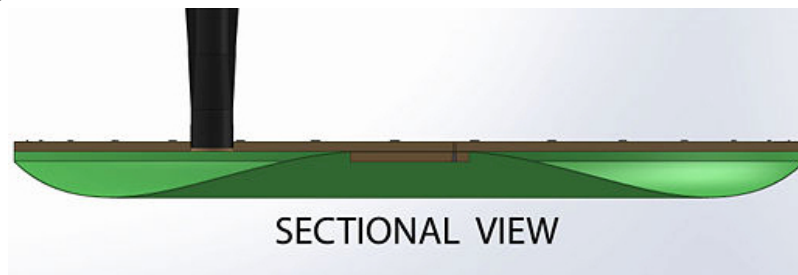
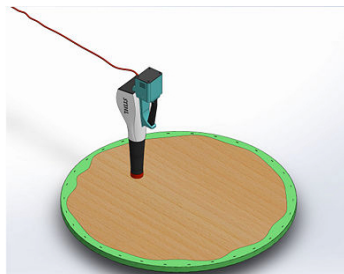
Student Name: _____

Directions for Students: Place a check (✓) in the blank space if you think the statement is true.

What are some things that are true about the Hovercraft in our colony?

✓ if Yes

- ___ The hovercraft was used as transportation in our Mars Colony.
- ___ Air flows underneath the hovercraft when you turn it on.
- ___ The hovercraft moves without touching the floor.
- ___ The hovercraft is very quiet.
- ___ A vacuum that sucks up air will work the same as a blower to make the hovercraft work.
- ___ A hovercraft uses air to create less friction.



PLANT FARM STATION

Note to Parents: Please read the directions, the question, and each statement to your child.

Student Name: _____

Directions for Students: Place a check (✓) in the blank space if you think the statement is true.

What are some things that are true about plants and the Plant Farm in our colony?

✓ if Yes

- ___ Plants are not important for our survival.
- ___ The Plant Farm was needed to help grow food.
- ___ Plants need water, soil, and sunlight to grow and survive.
- ___ On Mars, people need to take care of plants or they won't grow and survive.
- ___ Plants left alone on Mars will grow on their own.
- ___ Plants make oxygen that we breathe.



MARS SHELTER HOME STATION

Note to Parents: Please read the directions, the question, and each statement to your child.

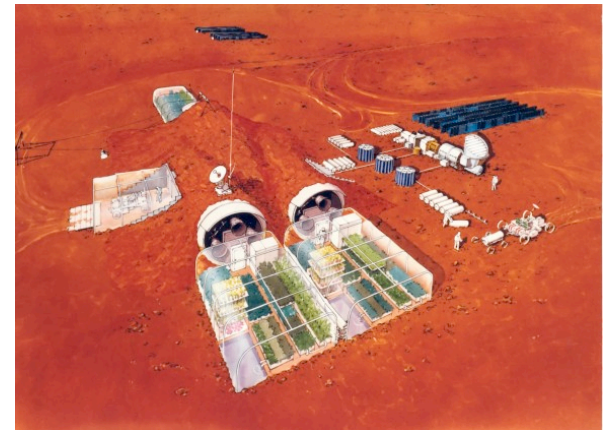
Student Name: _____

Directions for Students: Place a check (✓) in the blank space if you think the statement is true.

What are some things we should remember from designing and building our shelters?

✓ if Yes

- ___ Shelter homes were built as a place to sleep and to provide protection from the outside.
- ___ It is important to make a design plan before building.
- ___ It is helpful to include things in the shelter home design that will help us meet our survival needs.
- ___ Shelter homes are not needed for a long-term stay.
- ___ Working in groups can make it easier to accomplish building a shelter.
- ___ Only one kind of material was used during building.



POWER SOURCE STATION

Note to Parents: Please read the directions, the question, and each statement to your child.

Student Name: _____

Directions for Students: Place a check (✓) in the blank space if you think the statement is true.

What are some things that are true about generating power for our colony?

✓ if Yes

- ___ We used energy from the wind to power our Mars colony.
- ___ Propellers on a windmill move because of the wind.
- ___ Wind energy will run out.
- ___ Wind energy is not possible on Mars because there is no wind.
- ___ Wind turns propellers that turn a generator to make electricity.
- ___ Solar energy is another way of generating power on Mars.



ANSWER KEY

Traveling-To-Mars

A space shuttle needs to travel at a high speed to leave Earth's atmosphere.

Mars is far way, but it is only the next farthest planet from the Sun after Earth in our Solar System.

Astronauts experience weightlessness in outer space.

The flight path from Earth to Mars is a curved path because both planets are in orbit around the Sun.

Hovercraft

The hovercraft was used as transportation in our Mars Colony.

Air flows underneath the hovercraft when you turn it on.

The hovercraft moves without touching the floor.

A hovercraft uses air to create less friction.

Plant Farm

The Plant Farm was needed to help grow food.

Plants need water, soil, and sunlight to grow and survive.

On Mars, people need to take care of plants or they won't grow and survive.

Plants make oxygen that we breathe.

Mars Shelter Home

Shelter homes were built as a place to sleep and to provide protection from the outside.

It is important to make a design plan before building.

It is helpful to include things in the shelter home design that will help us meet our survival needs.

Working in groups can make it easier to accomplish building a shelter.

Power Source

We used energy from the wind to power our Mars colony.

Propellers on a windmill move because of the wind.

Wind turns propellers that turn a generator to make electricity.

Solar energy is another way of generating power on Mars.

Image Citations

Hovercraft: <http://www.wikihow.com/Make-a-Hovercraft>

Mars Shelter Homes: <http://www.universetoday.com/108966/mars-space-colony-rockets-could-be-ready-in-10-years-spacex-ceo/>

Power Source: <http://marssettlement.org/2013/05/31/options-for-energy-production-on-mars/>