



MINIS AT HOME

volume 1, issue 22

Greetings kids, parents, grandparents, guardians, friends and neighbors!

Welcome to issue 22 of Minis at Home newsletter. Each newsletter features a special theme and offers pertinent information, a craft, and recommended reading. Grownups: please work on projects together with your children. Your pARTicipation is important! We will offer hints and tips for ways to create art as a twosome or a family.

This week's theme = Mars



Recently, the **rover Perseverance** landed on the planet **Mars**! Perseverance is the 5th rover that has visited Mars. Rovers are **robotic vehicles** that move around planets to study and photograph them because humans cannot. Rovers have only visited Mars because Mars is our closest planetary neighbor. We have learned a lot about Mars because of the rovers' work.



Humans have always been explorers and are curious about the mysteries of **space** and our **Solar System**.



What is space? Space is the area all around our planet **Earth** and beyond. Our Solar System is made up of the **Sun** (at left in the picture above) and all the planets that **orbit** (circle around) it. Earth and 7 other planets share the Sun. Can you guess which planet above is Earth? Hint: Look for the oceans and clouds.

Because all the planets in our solar system are so far away from Earth—and from each other—it takes many months, and possibly years, for even a very fast rocket to reach them. Space is also not very **habitable** for humans. This means that it would be impossible for humans to live in space because there is no **oxygen**, which is what we must have in the air in order to breathe. Space is also very dark, and there is no **gravity**, meaning we would float and float without being able to walk or run on the ground. Other planets are way too hot or cold and windy for humans to survive. For these reasons, space exploration is difficult and dangerous for humans. **Astronauts** cannot visit Mars or other planets until we know more about them. Because rovers are robots, they can safely visit Mars. Rovers are pretty amazing robotic vehicles. They move around and collect rocks, dirt, and any other interesting things they may find. Rovers can study these things and send information back to Earth.

Activity: Armchair Astronaut

The rovers send us lots of pictures of Mars. Here are some great places to see them:

<https://mars.nasa.gov/mars2020/>

<https://www.youtube.com/watch?v=M4tdMR5HLtg>



Although astronauts cannot yet visit Mars, they do travel into space. Astronauts are specially trained to travel on rockets and live in space. Their special space suits and helmets help them breathe, see, and stay safe. Spaceships are also equipped so that the astronauts can live, sleep, breathe and eat while in space. Many astronauts from different parts of the world spend time on the **International Space Station**, learning about our solar system and Earth. The International Space Station (below) floats and orbits just above Earth. It is like a space hotel for astronauts. Humans are still learning all about space and how astronauts might safely visit Mars in the future.

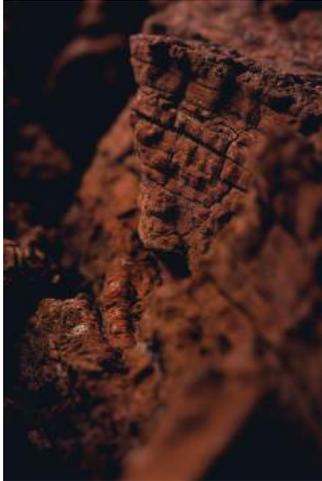


All About Mars:

Mars is the planet closest to Earth, so that makes it the easiest planet for rovers to visit. Mars is the second smallest planet in our solar system, and the 4th planet from the Sun. Mars is half the size of Earth and has 2 moons called Phobos and Deimos. It has the highest mountain in our entire solar system. Mars' gravity—the force that keeps us on the ground—is so weak that if you jumped into the air, you would be able to jump almost as high as your house! Mars has a North and South pole covered in ice and snow just like Earth. Of all the planets in our solar system, humans have known about Mars the longest because, before we had large telescopes and rockets for investigating space, we were able to see it with our own eyes. Sometimes, we can see Mars from our backyards on a very clear night!



Mars and Its Moons



Surface of Mars

Another name for Mars is the "Red Planet." If you see what looks like a reddish-colored star in the sky, this is probably the planet Mars. Mars was named after the Roman God of War because war usually means battle, and battles often bring bloodshed and fire. The planet looks red because the rocks and dirt that cover it are reddish-brown. Have you ever discovered rocks or dirt that look red? Or have you seen a desert in which the ground and rocks are red? Take a look at pictures of the Grand Canyon

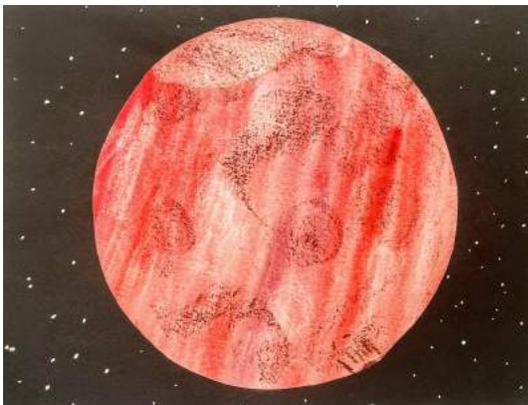


Grand Canyon, Arizona

or a look at a satellite picture of a desert on Earth. The reddish color in the rocks and dirt usually means that there is iron that has oxidized or rusted. If you leave something made out of metal, like a fork, a shovel or a metal can, outdoors for a long time it will eventually rust, becoming an orange-reddish color. Mars is one giant desert! From space, Earth looks blue, green and white because Earth is covered with oceans, forests and clouds. Our planet is a living planet with lots of life! Mars may once have been a living planet which is what Perseverance may find out. Perseverance landed on a crater that scientists think may have once been a lake billions of years ago. If it was a lake with water, there may have also been life on Mars. Just as Earth has life in its oceans, lakes and rivers, Mars may also have had life billions of years ago.

Activity: Craft

Painting Planet Mars



Materials:

- 1 Sheet of watercolor paper or card stock
- Black, brown and red crayons or oil pastels
- Red, orange and brown watercolors
- Large black paper for the background
- White markers or paint
- Paintbrush
- Scissors
- Glue Stick
- Small star stickers (optional) or metallic markers

Procedure:

Trace around a dinner plate or draw a large circle on the white paper, using most of the paper

Use crayons or oil pastels to make marks and swirls on the white circle (these will be the craters and texture for the planet)

Use red, orange and a dab of brown watercolors all over the circle, dabbing and mixing colors to make a "rusty" Mars color. The crayon will show through the watercolor to add texture and planet features

When dry, cut out circle and glue onto black background paper

Make small white and/ or metallic dots all over the black background for stars. You may add small star stickers if you like.

Activity: Move and Chant**Five Little Astronauts** (original source unknown)

(Hold up each finger on your hand while counting)

Five little Astronauts flying in the stars
The first one said, "Let's go to Mars!"
The second one said, "There are comets in the sky."
The third one said, "There's an alien there!"
The fourth one said, "Let's soar up in the sky."
The fifth one said, "Let's go up really high."
Then WOOOSH went the spaceship
Buckle up tight!
And the five little astronauts
Zoomed out of sight.

**I'm an Astronaut** (Adapted from kidzparkz.com)

Put on your spacesuit: we're going to the moon.
Climb aboard your rocket ship: We're going to blast off soon.

Put on your helmet; strap yourself in tight.

Check your controls and instruments.

Get ready for the flight!

Time for your journey:

The countdown has begun.

Get ready. Get set!

5, 4, 3, 2, 1 Blast off!

Literacy: POEM TO SHARE

Mars and Art by Constance Del Nero

Mars and art
make a lovely pair:
Give me a paintbrush,
I'll take you there!

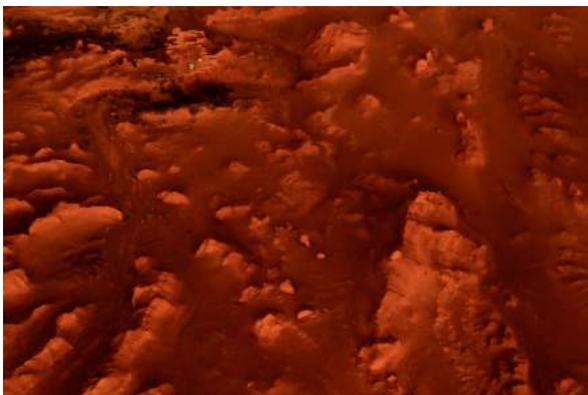
Red scribbles and dabs
and lots of brown dots
look just like the Martian rocks

25 million years ago,
Mars had an active volcano.
It coughed up iron, shiny black
that covered the ground, front and back

Over time this black and dusty mess
Got a reddish tinge due to oxygen
Mars' mountains, covered in dust,
now look red 'cause air made them rust

So I'll add more paint
and smush it 'round
to look just like the Martian ground.
Maybe add orange for good measure:
Painting Mars is such a pleasure!

Can you paint your own Martian treasure?



Literacy: RECOMMENDED BOOKS

Snuggle up in a big comfy chair and read together

Life on Mars by Jon Agee

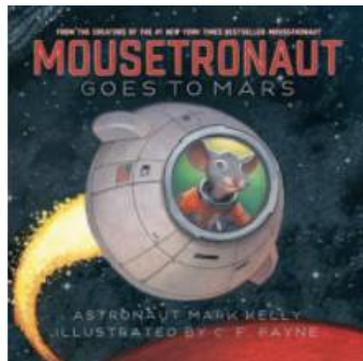
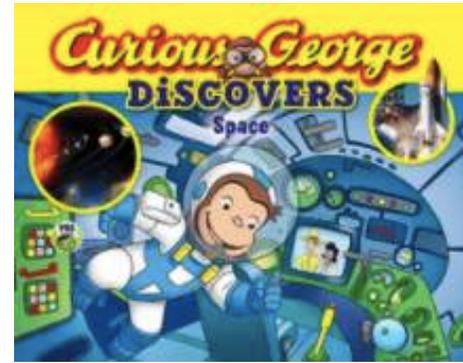
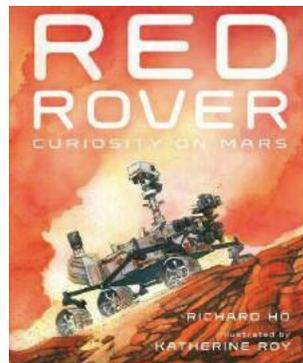
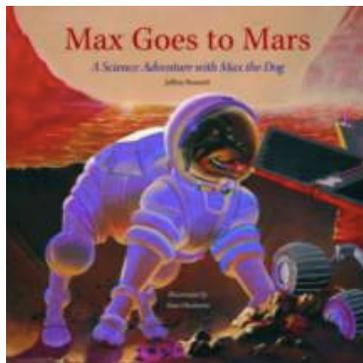
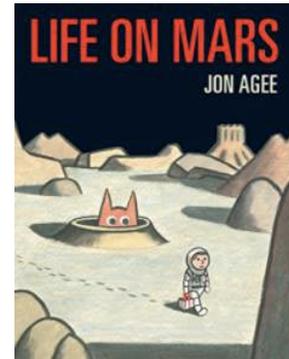
Max Goes to Mars by Jeffrey Bennett

Red Rover by Richard Ho

Curious George Discovers Space by H.A. Rey

Mousetronaut Goes to Mars by Mark Kelly

You Are the First Kid on Mars by Patrick O'Brien



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See you next week with issue 23 of *Minis at Home!*

Share your work on <https://www.instagram.com/minimastersaam/>

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