

Reaching for the Stars

Creative
Adventures





Creative Adventures at Home

Family Set-up and Supplies

The Reaching for the Stars Creative Adventures have been designed with the materials you have at home in mind! Here a few tips to help your child begin their creative exploration!

Gather Materials:

With your child, look for interesting materials you have around the house. Even just a few of the supplies below are enough for your child to begin creating!



- **Recyclables:** Cardboard, cereal boxes, egg cartons, plastic lids, etc. are all great materials
- **Drawing supplies:** Crayons, markers, colored pencils, paper
- **Attaching supplies:** Tape (scotch, masking, or duct tape) glue
- **Scissors**
- **Paper:** Newspaper, magazines, colored paper
- **Fabric:** Do you have any old clothing, sheets, or fabric scraps?
- **Natural materials:** Are there materials you can find outside to incorporate into projects? Leaves, bark, and rocks are also interesting materials for students to explore.

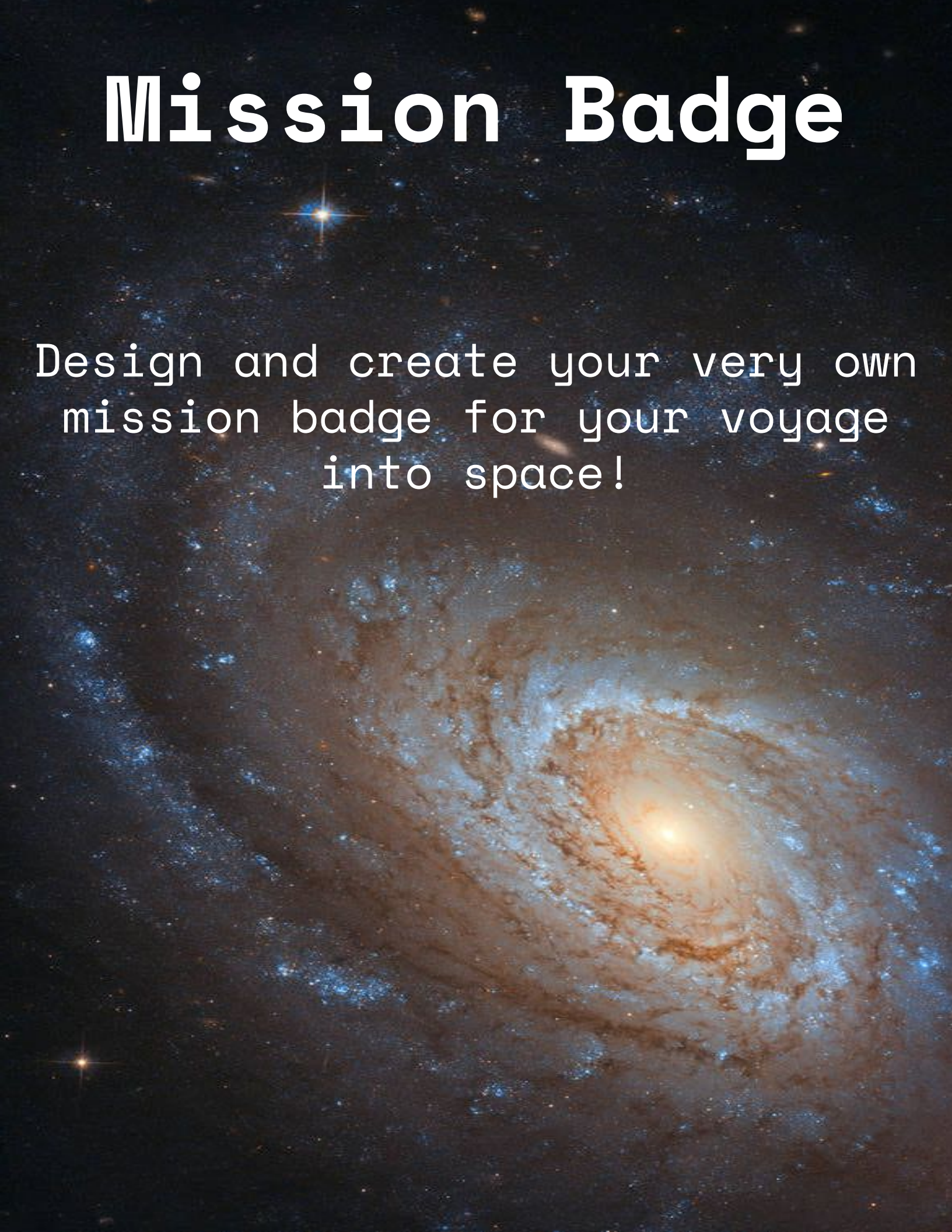
Set up a Creative Space:

If possible, set up a designated place for students to work on their projects. This can be as simple as a place on the floor or a corner of the kitchen table. We suggest that students work on top of a sturdy piece of cardboard (big enough to accommodate their projects and supplies) that can be easily moved out of the way. This will enable students to “get messy” in a more contained space, and also encourage them to keep working on their project if it is easily accessible!

Note: You know your child best. Some students like to have lots of different materials available to help stimulate their imaginations, while others do better with a more constrained set of supplies! Remember, there is no “right” project! Out-of-the-box thinking encouraged!

Mission Badge

Design and create your very own mission badge for your voyage into space!



MISSION BADGE: What kind of badge will you create for YOUR mission into space?



IMAGINE

Have you ever wondered what is unique about each astronaut's spacesuit?

Astronauts, it's time to get ready for your space mission! To prepare for this journey, we need to put on our spacesuits. Each of NASA's Space Missions has a specially designed badge. The badge appears on the astronauts' space suits, and might be painted on the spaceship and shown on TV! It's time to design your very own special mission badge for the Voyager 3! What will yours look like? What will you include in your design?

CREATE

Design a mission badge for the Voyager 3's mission into space, to show others the importance of learning about space! What will it look like? What story will it tell?

Try This:

- Sketch your vision for the badge on paper first!
- Draw at least 3 versions of your design first. Ask a family member for feedback on your designs, and then pick one to create with their suggestions!
- Think about what materials you can use to create your badge: we suggest paper or fabric to create the badge, but you can draw a picture or create a collage of pieces of paper, too!

Think about:

- What will be on your badge? What do you want to tell others about your mission?
- Will the badge have numbers, words, or pictures on it? All three?
- Will you include any planets on your badge?
- What shape will it be? What colors will you use?
- What is important from your mission to symbolize on your badge?

Need Inspiration?

- Explore different NASA badges throughout [history](https://history.nasa.gov/mission_patches.html) (https://history.nasa.gov/mission_patches.html) to help you brainstorm some potential ideas!



SHARE

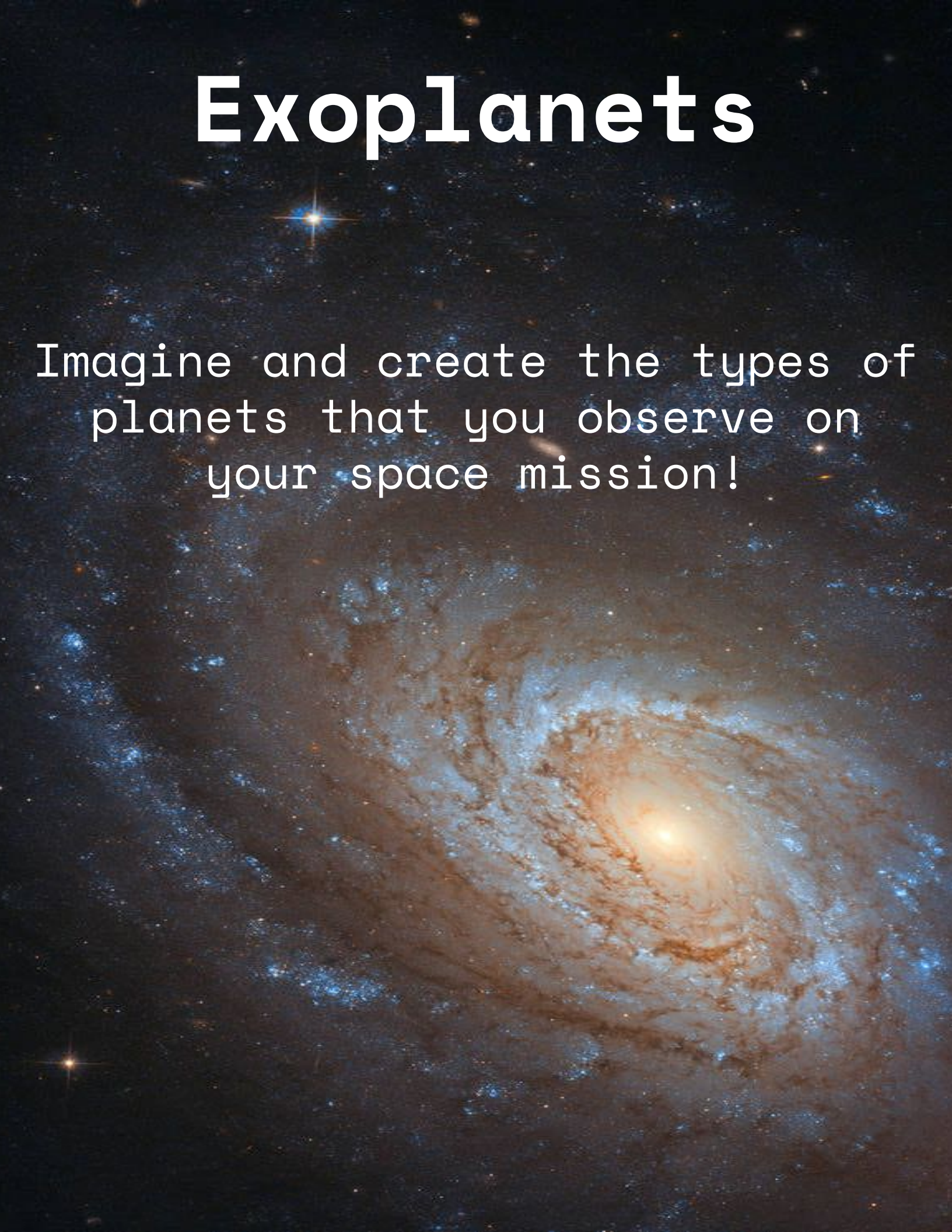
- Take a picture of yourself wearing your badge and share it with your classmates!
- Take a video of yourself wearing your badge. Describe each of its parts and your design decisions in creating your badge. Share the video with friends and classmates!

PROJECT EXAMPLES



Exoplanets

Imagine and create the types of planets that you observe on your space mission!



EXOPLANETS: What other planets exist beyond our solar system?



IMAGINE

Have you ever thought about what type of planets exist beyond our solar system?

Imagine: You are looking out the window of the Voyager 3 (or your rocket). What do you see? Stars, comets, asteroids...and all the planets of our solar system. Eventually, after a long time, you have passed beyond the edge of our solar system into space that no human has ever explored before. The dark sky is all around you. Suddenly, you see a tiny object in the distance. As you get closer, you realize it's a planet! Nobody has ever seen this planet before! You know that planets outside our solar system have a special name: exoplanets. Congratulations, you have made your first discovery!

CREATE

Create either a drawing or a 3D model of the exoplanet you've discovered. This will help you share valuable insights with the public on Earth!

Try This:

- Use the [exoplanet planning page](#) to help you brainstorm the characteristics of the exoplanet!
- Gather materials you have at home that you can use in your exoplanet model. Start tinkering, and see where you end up!
 - You might use: old balls, balloons, recyclables, paper, markers, etc.

Think about:

- What does the exoplanet look like? How is it shaped? What color is it?
- How big is the exoplanet? What could you compare the size to?
- What will you name the exoplanet?
- What type of terrain (i.e. mountains, grasslands, ocean) does the exoplanet have?
- Are there signs of life? Plants or other creatures?

Need Inspiration?

- Visit the [NASA website \(https://spaceplace.nasa.gov/all-about-exoplanets/en/\)](https://spaceplace.nasa.gov/all-about-exoplanets/en/) to learn more about exoplanets that have already been discovered!!



SHARE

- Name your exoplanet! And, if you want, tell the imagined story of how this exoplanet was named.
- Show your family members your exoplanet model and describe each of its features.
- Take a photo of your creation and label each of the parts.
- Take a video of yourself showing your exoplanet and describing its characteristics to share with your teachers and classmates!

Exoplanet Planning



What is the planet called?



What is the climate like?



Describe or draw the texture of the planet surface:

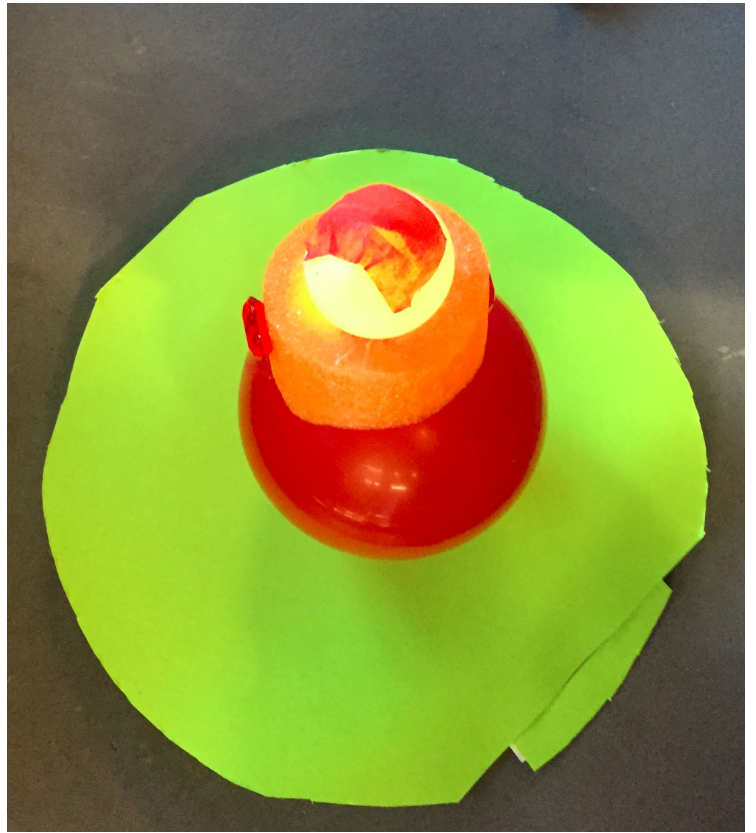


Is there vegetation?



Any signs of life?

PROJECT EXAMPLES



Extraterrestrial Life

Imagine and create the types of extraterrestrial life forms or plants that you encounter during your space journey.

EXTRATERRESTRIAL LIFE: What types of creatures exist beyond our solar system?



IMAGINE

Have you ever wondered about what life exists beyond our solar system?

You step off of the *Voyager* (or your rocket) for the first time. You turn and look all around you at the surface of your exoplanet. It is beautiful, but seems perfectly still and quiet--just like you expected. But wait! There is something in the distance that looks out of place. Is it moving? You decide to walk closer. It looks nothing like any plant or animal you've seen on Earth, but you think it might be alive! You want to observe carefully before saying hello...

CREATE

What sort of extraterrestrial life do you encounter when you step outside Voyager 3 (or your rocket). Create a model or a drawing of this extraterrestrial using craft supplies, recycled objects, and paper!

Try This:

- Use the [extraterrestrial biography page](#) to brainstorm your extraterrestrial life's features.
- Gather materials you have at home that you can use to create with. Start tinkering, and see where you end up!
 - You might use: cardboard, recyclables, paper, markers, etc.

Think about:

- What type of life exists on other planets? How is it different from life on Earth?
- How does this life communicate?
- What kinds of senses do extraterrestrials have (Sight? Smell? Taste? Hearing? Touch?), and how do they sense them?
- How large or small are they? What do they like to eat? How do they move?

Need Inspiration?

- Think back to your exoplanet model--what type of creature might live there? What would life forms need to survive?
- Think about how many different types of life there are on earth--not all are animals! Your extraterrestrial life could be a plant or even a microbe!



SHARE

- Create a name badge for your extraterrestrial life! Be sure to include: *its name, special characteristics, and anything that you should warn others about, before interacting with it.*
- Take a video of yourself showing your creature and describing its characteristics, in your best creature voice! Share with your teachers and classmates!
- Write about a "Day in the Life" of your extraterrestrial creature and share it with your family members!

Extraterrestrial Biography



Name:

How do they communicate?

What kinds of senses do they use?

How large or small are they?

What kind of feelings do they experience?

How do they move? Eat? See? Breathe?



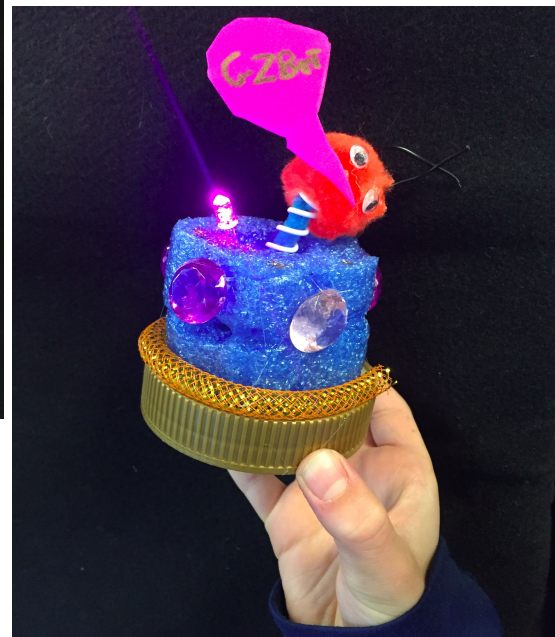
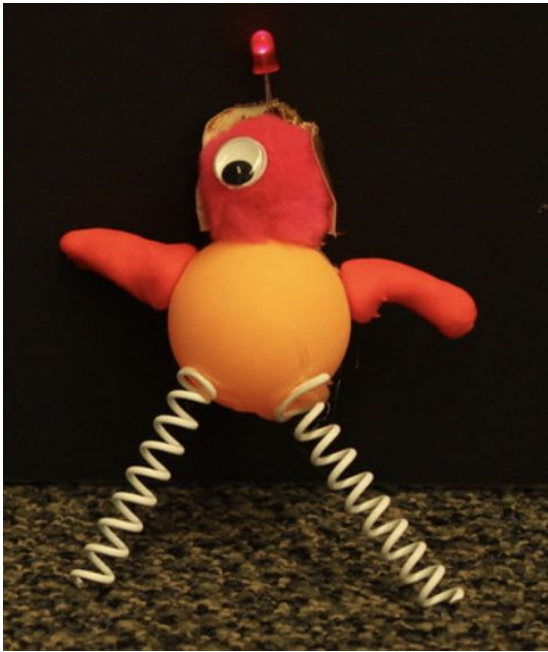
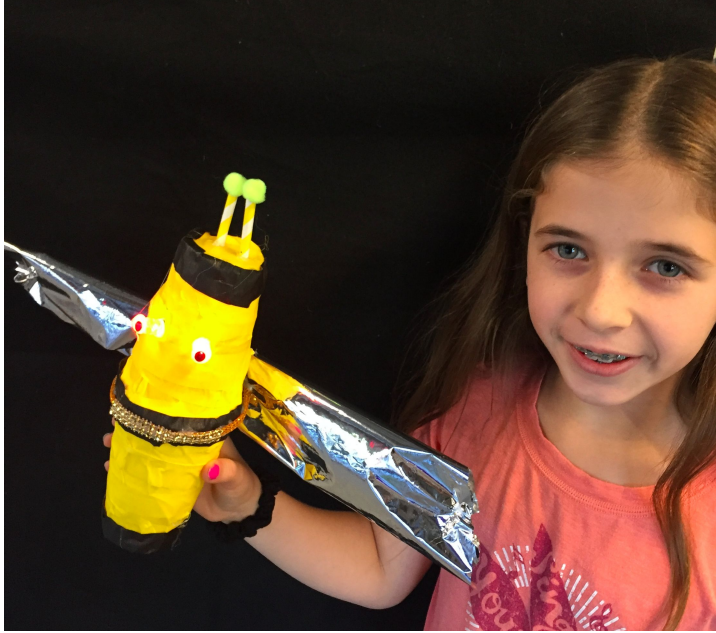


Extraterrestrial Name:

Special features:

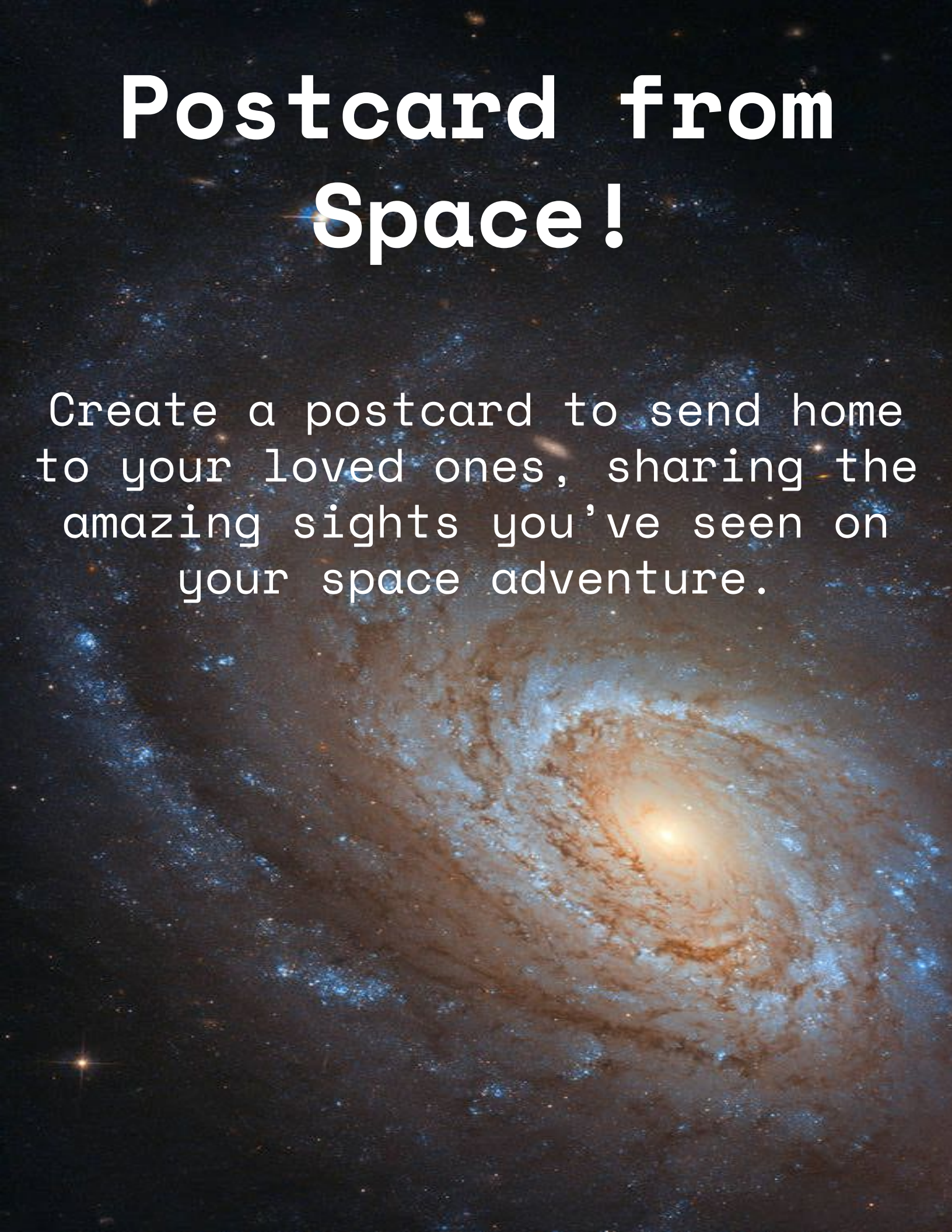
Designed by:

PROJECT EXAMPLES



Postcard from Space!

Create a postcard to send home to your loved ones, sharing the amazing sights you've seen on your space adventure.



POSTCARD FROM SPACE: What will you share with your loved ones about your journey?



IMAGINE

Wow--you've been away from Earth for a long time! People on Earth are eagerly awaiting news from your journey! Think about all you've accomplished so far on your mission! You've designed a mission badge, created your spacecraft, discovered an exoplanet, and even observed an extraterrestrial creature! Now it's time to share your discoveries with the public back on Earth.

What do you think is most important to share from your journey so far?

CREATE

Create a postcard that includes an illustration of something you've discovered on the Voyager 3 (or your rocket) and a description of your experience that you'd like to share!

Try This:

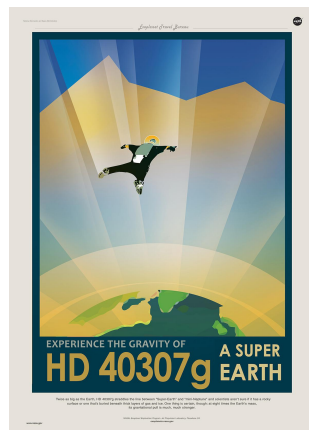
- Using any size of paper, create a postcard that includes one side for writing and one side for drawing! You can make this the size of a actual postcard or design a huge postcard!
- On the front of your postcard, draw a favorite sight from your trip to outer space. You might draw your view of the stars and planets, life on a planet you visited, or what it looked like inside your spaceship!
- On the back side of the postcard, write the name (and address if you want) of WHO will receive the message and then a short message about your trip! Don't forget to sign your name!

Think about:

- What will you tell your loved ones on Earth about your outer space journey?
- Who are you going to send your postcard to? A friend? Family? The scientific community?
- What other materials can you add to bring the illustration on your postcard to life?

Need Inspiration?

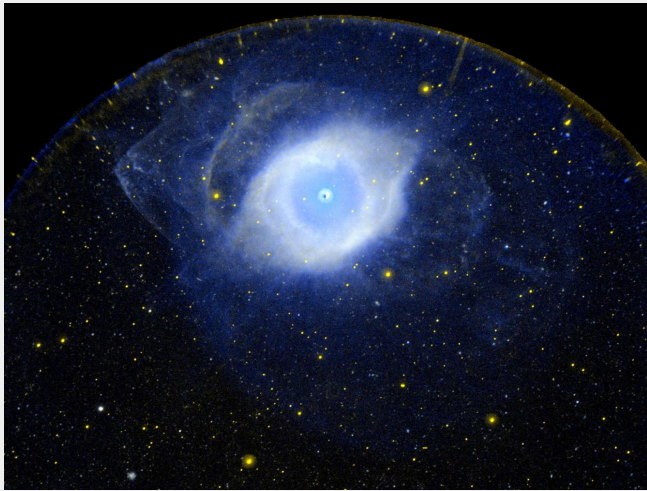
- Read what real astronauts wrote to people on Earth [here](https://www.nasa.gov/centers/johnson/astronauts/journals_astronauts.html) (https://www.nasa.gov/centers/johnson/astronauts/journals_astronauts.html)!
- Look at [examples](https://www.wikihow.com/Write-a-Postcard) (<https://www.wikihow.com/Write-a-Postcard>) of postcards.



SHARE

- If you want, you can give the person the postcard you made for them! Tell them all about your imaginary trip to space.
- How did you decide what to write about and share with others? Take a video of yourself and share your thinking with a family member or classmates!

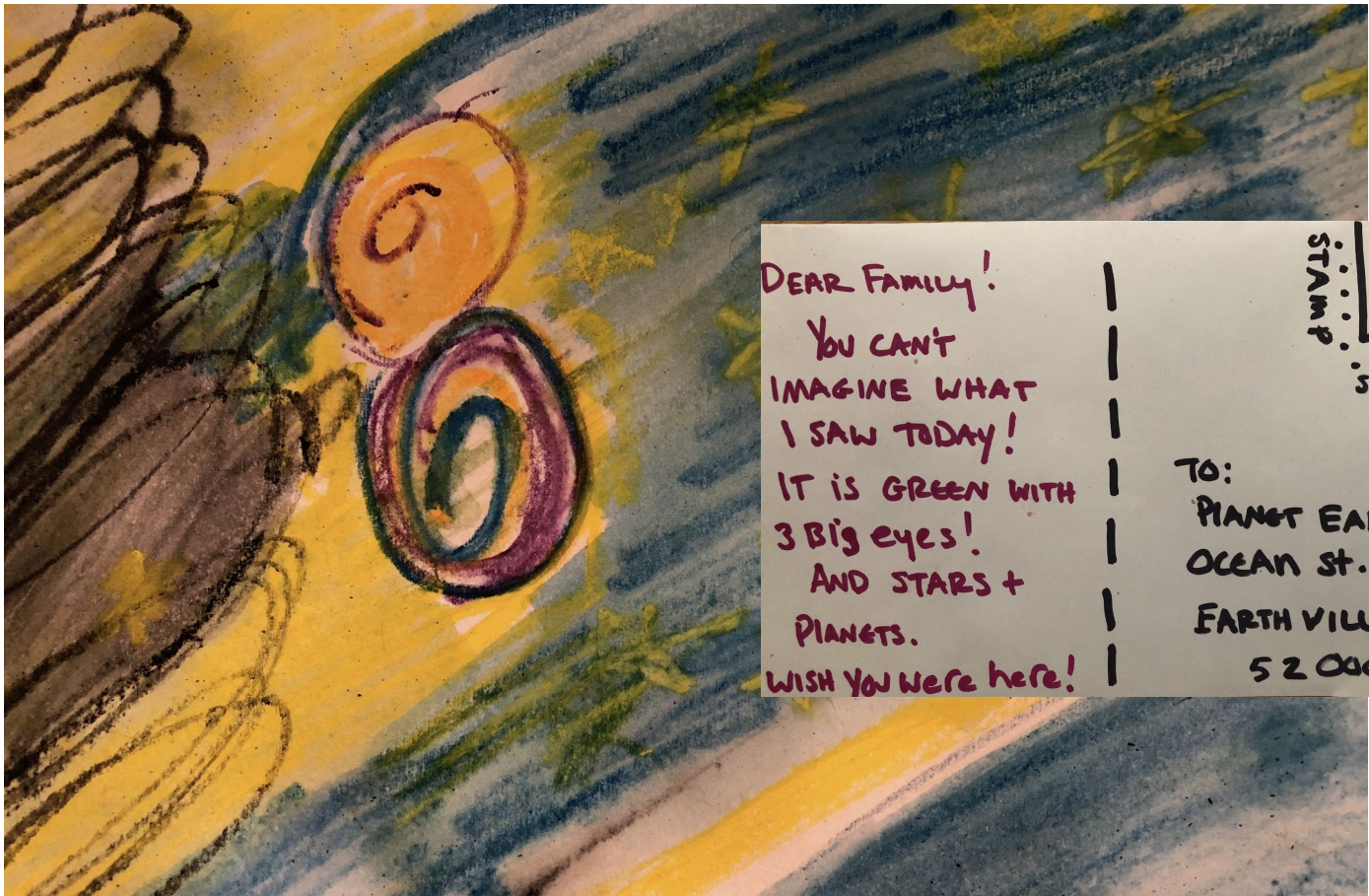
PROJECT EXAMPLES



NAME, PLACE, POSTING

YOUR FAVORITE DAY

FULL NAME	_____
ADDRESS	_____
AREA CODE	_____
STATE	_____
COUNTRY	_____



DEAR FAMILY!
YOU CAN'T
IMAGINE WHAT
I SAW TODAY!
IT IS GREEN WITH
3 BIG EYES!
AND STARS +
PLANETS.
WISH YOU WERE HERE!

STAMP
MOON
STAMP

TO:
PLANET EARTH
OCEAN ST.
EARTH VILLE
52 000096

