

# STEM Taught Camp

## I'm a Scientist

### Eugenie Clark: Day 2 Grades: TK-3

#### WELCOME

(5 min)

Earn sand dollars



#### STEM READERS THEATER

(30 min)

- Prepare: 10 min
- Act out story: 15 min
- Discuss story: 5 min

#### Materials:

- Print one copy of "Day 2: Diving in Micronesia"
- Three pairs of scissors
- One roll of tape

**Introduction:** Welcome your students to camp. Be friendly. Say, "Today we will have a fun filled day of art, experiments, games, and even a tasty treat! Let's dive into an ocean of fun like Genie."

Remind students that they can earn sand dollars when they complete a task, help another student, help set up or clean up, write in their journal, read a book, etc. Tally the amount of sand dollars that each student earned from helping and record it on the weekly pay role sheet.

#### READ SWIMMING THROUGH TIME WITH EUGENIE CLARK, DAY 2: DIVING IN MICRONESIA

**Prepare beforehand:** Print out one copy of "Day 2: Diving in Micronesia" from the Eugenie Clark story. Print one coloring page for each student from the "Student Sheets" section of Day 2. Gather scissors and tape.

#### What you'll do:

1. **Setup storytelling props (10 min):** Call up volunteers to help with the reader's theater for "Day 2: Diving in Micronesia." Ask students to cut out the story props found in the story document. Remember to tape the headband ends together to fit a child's head.

Students that are not helping with the story setup can color their coloring pages while they wait.

2. Gather all students and have them sit to listen to the reader's theater. Ask students to leave their coloring pages behind.

3. Assign a volunteer actor to handle each prop for story time.

4. Read the story to your students. Guide your volunteer prop holders in following the acting instructions as you read.

5. Discuss the story with your students, following the discussion prompts printed underneath the story text.



Eugenie Clark story.

## ART

(60 min)

### Materials:

- 12" x 12" Construction paper (or similar size)
- Paint (different shades of blue, green, and white)
- Paper plates
- Paper towels

## WAVE FINGER PAINTING

### Set up:

Prepare painting stations for groups of two to four students. Squirt blue, green, and white paint onto a paper plate for each group. Provide a piece of construction paper for each student. Have extra paper plates ready for students to have their own mixing plate if necessary. Provide paper towel for each student to clean their fingers as they paint.

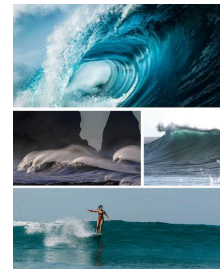


Wave finger painting

### Instructions:

Each student should make their own finger painting, but they will share paints in small groups.

1. Demonstrate to students that they can create different shades of blue and green by mixing colored paints with white paint.
2. Bring up the wave pictures provided ("Waves for Finger Painting.pdf") for students to look at and get ideas from.



Waves picture reference for finger painting ideas.

3. Supervise students as they use their fingers to paint a wave using different shades of paint.
4. Let some of the strokes of color be bold! It looks good if they aren't all blended into one color.
5. Students use their fingertips to make the white foam on top of the wave. They can also add a little white foam to other parts of the wave.

**Tips:** Interact with your students as they do their artwork. Encourage your students to use different shades of paint, make bold, bright colors! Students can use their fingertip to make the white foam on top of the wave.

## SNACK CRAFT

(30 min)

### Materials:

- Paper plates
- Plastic knives
- Graham crackers
- Frosting with blue food coloring
- Goldfish crackers, gummy shark, or teddy grahams
- Lettuce

## MAKE “GRAHAM CRACKER BEACH” SNACK CRAFT

### Setup:

At each table, set out paper plates, plastic knives, graham crackers, blue frosting, and goldfish crackers, gummy sharks, or teddy grahams. Lettuce can be used for seaweed.



“Graham Cracker Beach” snack art

### Instructions:

Every student will use a graham cracker to use as their canvas to create an edible beach scene snack craft! Students can spread blue frosting onto the cracker as water and use crushed up graham cracker as sand. Then, they can add the Goldfish crackers or gummy sharks. Eat and enjoy!

## SINK OR FLOAT STEM EXPLORATION

(60 min)

### Materials:

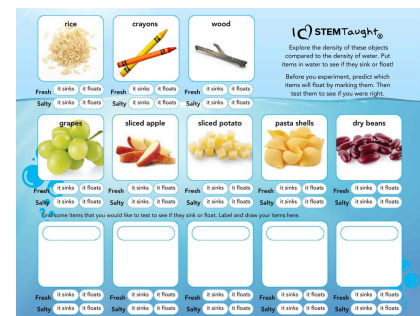
- 2 test tubes each
- Pipettes
- Scoopy spoons
- Water
- Salt
- Various items to test: Grapes, sliced potato, sliced apple, rice beans, pasta shells, crayons, wood items, or twigs

## SINK OR FLOAT EXPERIMENT

Note: This is a fun activity to do outside because it involves water!

### Summary:

Students will place various items in their water filled test tubes to see if their items sink or float in fresh water and salt water. First, each student can look at their worksheet and make predictions. Then, they can experiment to see if they were right.



Sink or Float worksheet.

### Setup:

1. Print out a “Sink or Float” workseet for each student.
2. Fill pitchers with water, and pour salt into a few containers for group sharing. Set out stations so students can each get two test tubes, a Scoopy spoon, and a pipette.

### Instructions:

1. Instruct the students to use their pipettes to fill two test tubes with water up to the 40 ml line.

## SINK OR FLOAT STEM EXPLORATION

2. Students should add salt into one of their water filled test tubes. The water should become cloudy with salt. Ask your students to put the cap on their test tube and jump up and down to shake it all around until the salt dissolves into the water. Add more salt until the water is so saturated that it cannot accept any more salt and there is a little remaining at the bottom of the test tube.

3. Students will experiment with all of the items set out to see if they sink or float in fresh water and salt water.

Tip: Guide your students to make predictions and observations about what might sink or float! Encourage them to find the interesting items that sink in plain water but float in salty water! Who can discover which items can do this?

Say, "The saltwater is heavier because you added salt to the water. Things that are lighter, or less dense than the heavy salt water can float!"

## STEM EXPLORATION

(30 min)

### Materials:

- Bins/water tables
- /baby pools
- Shells
- Rocks
- Plants
- Plastic fish/plastic aquatic animals
- Boats
- Little people figures

## OCEAN SENSORY BIN

### Summary:

Students will play with items placed in bins or pools of water.

### Setup:

Go outside and fill bins, water tables, or tubs with water, shells, rocks, plants, plastic fish or other aquatic animals, boats, little people figures, etc.

### Instructions:

Let your students have plenty of time to explore, enjoy, and play in the ocean sensory bins or baby pools.



*Students explore items floating in the ocean sensory pool.*

## STEM GAMES

(60 min)

### Materials:

- Board games
- Legos
- Blocks
- Coloring supplies
- Books
- Stacking cups

### Materials:

- 12+ Bean bags/balls
- 5 hula hoops

### Materials:

- Basketballs
- 2 large tubs or boxes (and books or something heavy to weigh them down)

## GAMES/KIDS CHOICE

Allow students time to connect with each other through a fun game or let them choose to read. If the students have not had time to draw/write in their journal, have them take some time to do so now.

### Kids' Choice:

Choose between options that the teachers have set out: Board games, building with Legos, blocks, or other things, reading, coloring/drawing (include ocean related coloring pages), cup stacking.

### Game choice 1: Seagulls and Terns

1. Place hula hoops in each corner of the play area. Place a hula hoop in the center for all the bean bags/balls.
2. Divide kids into 4 small teams, no more than 4 on a team.
3. Each team will stand by their hula hoop nest. Leader will blow the whistle or say "GO". One person from each team will run to the center and get a bean bag and take it back to their nest, then the next person on the team runs to the center and gets a beanbag and brings it back.
4. Play continues till there are no beanbags left in the center.
5. When the leader notices there are no more eggs in the nest, she yells "Rob the Nest." All the kids can go take a bean bag from any other nest. After 1-2 minutes she blows the whistle and yells "Stop". The team with the most beanbags in their nest wins. Two rules, no blocking your nest, and only take 1 bean bag at a time.

### Game Choice 2: Feed the Shark: (AKA Indoor Speed Basketball)

1. Divide the kids into teams, no more than 8 on a team. Kids line up behind each other on one side of the room. Keep about 6 feet between each line of kids.
2. Place a big tub/box about 15 feet in front of each team. A helper will stand behind each tub to retrieve the balls and roll them back to their team. The 1st person on each team will have a basketball.
3. On "GO" they will throw the ball into the tub. If the ball goes in the tub, the player goes beside his team and sits down, and the ball is rolled to the next person on the team. If the ball doesn't go in the tub, the player goes to the end of the line and waits to try again.
4. All teams play at the same time. Speed is important!
5. Play continues till everyone on a team has made a basket and the whole team is sitting down. They are the winners. If there are more than 2 teams, play continues to see which team comes in 2nd place.