

STEM Taught Camp

I'm a Scientist

Eugenie Clark: Day 2 Grades: 4-8

WELCOME

(5 min)



STEM READERS THEATER

(30 min)

- Act out story: 15 min
- Discuss story: 5 min
- Activity: 30 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 like Genie into some ocean fun!"

Remind students they have the opportunity to 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 has earned from helping and record it on the weekly pay roll 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.



Eugenie Clark story

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.

STEM TIME

(30 min)

Materials:

- Puzzles



SOLVE PUZZLES

Say, "Today we are going to solve puzzles together! Solving puzzles is a great way to practice grouping similar items and problem solving. These skills are important in coding and math."

Choose a puzzle for the students to solve together. When solving a puzzle there are some techniques that can be used. Share the following techniques with the students:

1. Flip over all the pieces.
2. Find all of the border pieces. These are the pieces with a flat edge.
3. Form the border.
4. Gather pieces that look like they belong together. They might have the same colors or patterns.
5. Form little piles of these pieces.
6. Try fitting the pieces with similar pictures and colors.
7. Help each other and the puzzle will come together.

ART

(60 min)

Materials:

- 12"×12" paper
- Paint (different shades of blue, green, and white)
- Paint brushes (different sizes)
- Paper towels
- Cups of water



Wave finger painting

WAVE PAINTING

Set up:

Squirt the different colors of paint onto a paper plate, mixing some of the blue and white to make different shades. Place a paper towel, a cup $\frac{1}{2}$ full of water, and a paper plate of paint to share between every 2 kids. You may want to do this painting with smaller groups of kids at a time. Or you can lead a step by step example by painting along with the group.

Instructions:

1. Draw a curl of a wave very lightly with pencil.
2. Paint the wave using different shades of paint, and different brush sizes. Experiment with using the side of the brush, too.
3. Let some of the strokes of color be bold! It looks good if they aren't all blended into one color.
4. Use your fingertip to make the white foam on top of the wave. You can also add a little white foam to other parts 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.

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, add the gold fish crackers or gummy sharks. Eat and enjoy!



SINK OR FLOAT STEM EXPLORATION

(30 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.

Instructions:

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

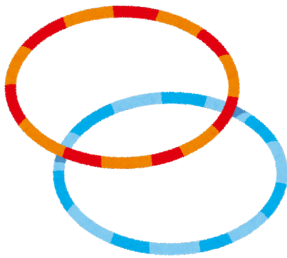
(60 min)

Materials:

- Board games
- Building bricks
- 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.

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. The 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 bean bags 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.
6. Two rules: no blocking your nest, and only take 1 bean bag at a time.

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.
3. The 1st person on each team will have a basketball.
4. 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.
5. All teams play at the same time. Speed is important!
6. 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.