



Summer Camp

Voyage to Ulithi Day 13

4-8TH GRADE

WELCOME

(5 min)

Instructions: Say, "Today we are going to design and make water filters!"



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 earned from helping and record it on the weekly pay role sheet.

GAME TIME

(25 min)

Materials:

- Timer
- Paper and pen to write down list of marine animals and to keep score

Some marine animals you may want to include:

coral, clams, sponges, sea horses, sea turtles, parrot fish, shark, clown fish, crabs, lobster, jellyfish, sea star, eels, octopus, snails, sea anemones, puffer fish, rays, sea urchins

UNDERWATER THEMED CHARADES

Objective: Two teams will compete to guess what their team members are acting out. In this game of charades, the students will become familiar with creatures that live in coral reefs as they take turns acting out the different creatures. Before beginning, explain to the students that the ocean has many creatures. Ask if anyone can name a creature. Share with them that today they will be playing a game that incorporates many of the sea creatures that live in coral reefs.

Instructions: Organize students into two teams. Each team competes against the other. To play, one team will go first. One student at a time will be given the name of an animal from the instructor. Some marine animals might be more difficult to act out, or the students may not know what it is. The instructor may give tips before the student begins the game. Students are encouraged to use their imagination! The student will act out this animal without speaking, moving lips, or pointing to give clues. The student's team will try to guess what their team member is acting out. They will have 1 to 2 minutes to guess. If they guess right, they get a point, but if they do not guess correctly, the other team will have the opportunity to make a guess. If the other team guesses correctly, they get the point. The game continues with the other team taking a turn. After each round, another student will be chosen to be the actor for their team. The game continues until either one team reaches 10 points, or until time is up.

STEM TIME

(60 min)

Materials:

- Camp journals
- Solar ovens
- Metal tin or tray
- Nacho supplies

SOLAR OVEN NACHOS AND JOURNAL

Instructions:

1. Take the solar ovens outside, and set them in the sun to pre-heat.
2. Prepare the nachos. Each student will need a metal pan or tray. Have them place chips on the tray, and sprinkle them with the desired amount of cheese.
3. Place the trays into the solar ovens.
4. Wait for the cheese to melt, then add toppings and enjoy!
5. While the nachos are cooking, have students write and draw in their journal.



STEM TIME

(60 min)

Materials:

- Water bottles or cups
- Scissors
- Secchi strips
- Dirty water
- Grass, pebbles, rocks, sand, cheese cloth, fabric, a strainer, mesh, paper towel, cotton balls, coffee filters

GAME TIME

(30 min)

Materials:

- Two chairs
- White board
- Dry erase marker

Example of words and clues: **Hot air balloon**

Float, ride, sky, high, basket, rise, colorful

Football

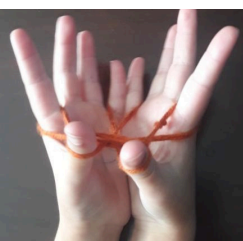
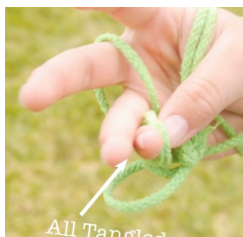
Sport, throw, jersey, Packers, touchdown, stadium, brown

STEM TIME

(60 min)

Materials:

- A piece of string/yarn



MAKE A WATER FILTER

Say: "As water seeps into groundwater reservoirs it is naturally filtered and cleaned of impurities by soil. Additionally, groundwater remains clean because it exists underground where harmful microorganisms cannot grow. Surface water, however, is often not safe to drink. Drinking unclean water can cause serious sickness. Removing sediment is the first step of water purification. Today we will be designing a simple water filter to remove the sediment from muddy water."

Instructions:

1. Students cut a plastic bottle as a funnel to hold the filter materials.
2. Students plan how to construct their filter and gather the materials they need.
3. Students construct their filters.
4. Students pour muddy water through their filters to see how clean it becomes, using their Secchi strips to measure the clarity of their water before and after filtration. Ask: "What features of your design worked well? What features of your design did you, or would you, improve to make your water filter better?"

WORD GAME: HOT SEAT

Objective: The player in the hot seat will guess the word from one-word clues.

Instructions: Organize the students into two teams, or boys vs. girls. One player from each team will sit in a chair in front of the room facing the teams. Write a word on the board behind them. Explain to the teams that they are to give a one word clue to their teammate who is in the "hot seat" describing the word on the board. The clue cannot contain any part of the word. The students on team #1 will raise their hands if they have a clue. The teammate in the hot seat will call on one of them. After a clue is given the player can guess what the word is if they think they know it. If the word is not correct, then team #2 will have a turn to give their teammate in the hot seat a clue. That player can guess the word. The round will continue until one player guesses the word and earns a point for their team. The round ends, and two new players are chosen and a new word is written on the board. The first team to reach 5 or 10 points wins!

MARINE TANGLE

Say: "Today, you will see how getting tangled up can be a dangerous situation for an animal. It is easy to become entangled but hard to become free again. In Marine Tangle, you will get to demonstrate how animals can become entangled in trash such as string, rope, netting, and plastic bags. In this activity you will pretend your hand is an animal, and you will explore what it is like to try to get out of a tangle using only one hand." *Do this activity in small groups with adult supervision. You may wish to do this activity by inviting students to come up to the front of the class to help with the demonstration one at a time.

Instructions:

1. Decide what type of hand animal you want to have. You can make your hand into any kind of animal. You could be a seagull, a fish, a shark, a whale or even a sea turtle. Your arm could be a beak, or your fingers could be flippers. Draw eyes, feathers, wings, etc. on your hand. Be creative!
2. Tangle your hand up with a loop of yarn as well as possible.
3. See if your hand animal can untangle itself. You have one minute to get the yarn off your hand. Remember, you can't use ANY help from your other hand! Can your hand animal free itself? **Explain: Animals don't have hands and thumbs to help them get free if they become tangled. A simple loop around a bird's foot or neck could trap a wild animal.**