

Surf Sleuth (Seine Nets) Pre-Post Trip Activities

Activity 1. What Could We Catch

Before doing any research, ask the students to draw all the animals they think will be in the ocean when they go seining/what they think they might catch. Once everyone has drawn their oceans, have the students talk about their drawings. Research what kinds of fish/animals are most common around Tybee Island. As an extra challenge, have the students draw one of the common fish they might see and label all the parts of it.

Activity 2. Design a Fish

The shape of a fin on a fish reflects the fin function; a thin fin is good for making quick adjustments for fast swimming fish; a larger fin is slower and more energy efficient. Research the different fins that fish have and how they can be different shapes. Have each student design and draw a fish with all its fins. Have students explain their fish and why it has certain kinds of fins.



Activity 3. Compare and Contrast

Review with the students the anatomy of fish and the function of each body part. Have the student choose an organism that lives in the ocean that is not a fish (dolphin, sea star, and jellies, etc). For the organism they choose, they will do a comparative analysis of its anatomy by: drawing their chosen organism and creating a comparison chart listing at least one internal and external body part that differs between the two species.

Activity 4. Fishing Method Madness

Research on different methods of fishing and find 4-5 main methods to share with the class. Give a short background on each method and then break the class into groups and have them do an in depth report about one of the methods discussed in class. This report can cover how the method works to catch fish, who use this method (ex. fishers, shrimpers, crabbers, researchers, etc.), where these people are from, and what fish or other animals are caught using this method. Bonus points could be offered to make a small 3-D model of the fishing method to show the class.

Activity 5. Sustainable Fishing

Sustainable fishing practices are incredibly important in supporting marine ecosystems. Have students become fishermen by modeling bycatch (caught unintentionally), sustainable fishing, and having fun trying to move popcorn from one bowl to another. Discuss what happened each round and how can we keep areas from becoming depleted of fish. (Additional instructions can be found on page 2).



Additional Instructions

Activity 3. Sustainable Fishing

Materials:

- | | |
|----------------|-----------|
| ✿ paper plates | ✿ paper |
| ✿ cups | ✿ popcorn |
| ✿ straws | |

Round 1:

1. Split your students into groups of three-four.
2. Every group will have a paper plate with popcorn (fishing hole), and each student will have their own straw (fishing line), cup (cooler/bucket), and paper (fishing log).
3. The students will fish by sucking pieces of popcorn with their straws and transferring it to their cups (no hands). Any pieces that are dropped in the process are labeled as “bycatch” and counted as their own section on the fishing log. Every student will fish from the ocean (the plate) at the same time. Give the students 20 seconds to fish for the first “season”.
4. After the allotted time, have them count the amount of fish they caught (# pieces in their cup), the amount of fish left in the ocean (# pieces on the plate), and the amount of bycatch (# pieces dropped on the floor) and record in their fishing logs.

Round 2:

1. In this season, fishers must catch at least two fish to survive to the next round; they must sit out if they did not catch the minimum.
2. Add a few fish to demonstrate reproduction for the second round, but they will catch fish the same way as the first and record their catch.

Round 3:

1. Introduce technology to each group and give one student a spoon (to represent trawling) for more effective fishing.
2. Continue adding seasons until one group has run out of fish. Once they are out of fish, tell them that fishers often have to switch to a different fishing area, and allow them to invade other groups to continue fishing.
3. Keep fishing until all or most of the groups are out of fish. Make sure students are recording after every round and catching at least two fish each season.
4. Discuss what happened each round and how can we keep areas from becoming depleted of fish.

Making the best better!