**CORAL OUTPLANTING ACTIVITY**

*Materials*

* Branch cut into pieces of varying lengths (8-15 cm)
* Cardboard
* Modeling clay
* Labels: index cards, cardstock, or construction paper
* Rulers
* Toothbrushes
* Pencils
* Clipboards
* Paper for data sheet
* If you have underwater paper:
  + Shallow bin (large enough to fit clipboard)
  + Bucket
  + Small pail
  + Water

*Instructor Preparation*

1. To create “coral fragments”, cut a branch into pieces of varying lengths (8-15 cm). If possible, minimum thickness of 1 cm is preferred. Sand down edges if necessary.
2. Create “substrate” using the cardboard. You can bend or crumple the cardboard for rougher texture. Optional: form the cardboard into a ramp shape to give the students both flat and sloped surfaces to glue the coral fragments. This can be achieved by putting a rolled-up yoga mat and towel under the cardboard to hold its shape.
3. Prepare a simple data collection sheet for the following information:
   1. Team Name
   2. Date
   3. Coral fragment name
   4. Coral fragment length and width
4. Portion the clay so that each team has enough “glue” for 3 or 4 coral fragments, plus a little more to secure the label.
5. Cut index cards into labels big enough for team name, date, and coral name.
6. (If using underwater paper) Fill shallow bin with water for each team. The bin should be large enough to fit the sheet of paper.
7. Coral outplanting is a team effort. Divide students into Teams of 4-5 for each job: collect data, measure fragment, scrub substrate, glue fragment to substrate, and label fragment. Students will rotate jobs depending on the number of fragments.

*Instructions to Students*

1. Choose a role. Your team will rotate roles.
   1. Information Collector
   2. Coral Measurer
   3. Scrubber
   4. Coral Gluer
   5. Coral Labeler
2. Information Collector
   1. Write your Team Name and today’s date on the data sheet.
   2. Working with the Coral Measurer, write the measurements of the coral fragment.
3. Coral Measurer
   1. Measure the length of the coral fragment, from the very bottom to its highest point.
   2. Find the thickest part of the coral fragment and measure its width.
4. Scrubber
   1. Find a sturdy area where corals can grow. The area where the coral fragments will grow is called “substrate”.
   2. If there’s sand and dirt covering the area, use a toothbrush to scrub the area and clear a space for the coral fragment. Sand and dirt will prevent the coral from sticking to the surface.
5. Coral Gluer
   1. Take a piece of clay and roll it into a ball about the size of a Hershey’s kiss.
   2. Put the clay on the space that the Scrubber cleared for you.
   3. Stick the thickest end of the coral fragment in the center of the clay and press it down lightly.
   4. Smooth the clay onto the surface (or substrate) and coral fragment so that the coral fragment can stand by itself.
   5. Give the coral fragment a light tap to make sure it doesn’t fall.
6. Coral Labeler
   1. Write down your team’s name and today’s date on the label.
   2. Give your coral fragment a name and add that to the label.
   3. If you have time, decorate your label.
   4. Use a small piece of clay to glue the label near the coral fragment that your team planted.
7. Try a different role! Pass your tools to the person on your right. Repeat steps 1-6 for each coral fragment.

*Commonly Asked Student Questions / Potential Discussion Points*

* *What is coral outplanting?* Corals transported from nurseries and back onto reef habitats (RRN).
* This activity is just for fun and to learn about coral outplanting. The people who do real coral outplanting are trained professionals. They have permission to handle corals because they are helping them grow.