

## Sea Turtle

### Materials:

- Hair nets
- Coffee filters/sandwich bags
- Duct tape
- Beads of various colors
- Clear plastic containers
- Pipe cleaners
- Paper clips
- Picture of TED and sea turtles
- Other supplies to build TED
- Scissors

### Preparation:

1. Gather materials listed above.
2. Place beads (or other colored items) in clear plastic containers.
3. Print off picture of TED and sea turtles.

### Instructions:

1. Using examples on table, discuss the various ways fishermen catch animals – trawling (coffee filter), longline (duct tape), and gillnetting (hair net). See Sea Turtle STEM activity for more information on these types.
2. Share with students that commercial fishers capture other marine animals in their nets and what may happen to these animals.
3. Have students choose a type of 'net' to capture shrimp (select a color of bead to represent shrimp).
4. Students will try to capture as many of the shrimp and as few of the other species of marine animals as possible.
5. Students will count the number of shrimp and other animals they were able to capture with their net.
6. Instructor will explain the purpose of a turtle excluder device (TED) to the students and share the picture with them.
7. Students will use the remaining materials to build a TED with their original net.
8. Once they have added a TED on their net, they will try test it and see how many of the different species they can capture.

### Take Action:

#### Zoo:

There are 5 species of sea turtles inhabiting the Gulf of Mexico, all of which are either threatened or endangered. They include the Kemp's ridley, green, leatherback, Atlantic hawksbill, and loggerhead sea turtles.

Some of the threats sea turtles face in the Gulf are:

- Plastic pollution
- Entanglement in recreational fishing line, commercial fishing nets and recreational hooks
- Vehicle traffic
- Development of beaches and light pollution

Sea turtle populations are slowly recovering thanks to the collaborative effort of scientists, non-profits, universities, grass roots organizations and many dedicated people. The Houston Zoo has treated over 400 sea turtles since 2010 in our veterinary clinic, which are then brought to the sea turtle barn in Galveston to prepare for reintroduction. You may also catch a glimpse of a recovering sea turtle at the Zoo in the Kipp Aquarium.

The Zoo also assists by:

- Holding sea turtle events on Zoo grounds to increase awareness about sea turtles
- Educating teachers and students about sea turtle conservation efforts in Texas
- Partially funding and designing sea turtle awareness signs that are posted on Galveston beaches. Installed 100 sea turtle awareness and education signs on Bolivar Peninsula and Galveston Island.
- Participating in weekly beach surveys to look for stranded or nesting sea turtles.
- Supporting partial funding and construction of monofilament (fishing line) recycling bins to decrease the occurrences of sea turtle entanglement.
- Organizing beach and jetty cleanups to ensure trash does not end up in sea turtle habitat

**You:**

- Call 1-866-TURTLE-5 if you see a sea turtle on the beach, or if you see sea turtle tracks on the beach that run from the water to the dunes – if the turtle has finished nesting, there will be another set of tracks running back to the water. Tracks for Kemp's ridley sea turtles will be drags about 2 ft in diameter, and you should see marks from their flippers and flipper claw.
- Be a hero; reduce your use of plastic!
  - Use biodegradable garbage and doggie bags, they break down naturally and don't leave harmful chemicals behind!
  - Use a reusable bag whenever you shop. The reusable bags seen here can be purchased at the Houston Zoo Gift Shop, with proceeds going towards sea turtle saving efforts!
  - Buy a reusable water bottle and you'll never need to drink out of a plastic water bottle again!
  - Avoid party balloons if possible! When these items deflate they often end up in the ocean and sea turtles may eat them thinking they are food.