Grades 3rd-5th: Distance Learning Lab Guide

On the Distance Learning Lab webpage, watch the videos and do the activities listed below. Answer the review questions after each video or activity. Be sure to ask an adult in your home for permission before doing any activities. Some activities require a printer or craft supplies, if you don't have those simply watch the videos instead.

Clean Water section:

- Watch: "Stormwater Demonstration at Southeast Office" and "Tour of New Hanover County Arboretum" videos.
 - Which squares did the best job of soaking up the rain water in the rain water demonstration video?
 - Which square did the worst job of absorbing the rain water?
- Watch: "Soak-Spread-Slow Stormwater Song" and "Freddy the Fish Teaches About Stormwater" videos.
 - What are some ways that rain water can become dirty before it enters a creek, river, or the ocean?
 - o How can we help keep the water clean?
- Do: "Slowing Down Stormwater Activity Sheet". Time how long it takes for them to complete the 3 mazes on the worksheet.
 - Pour some water in the sink and watch how quickly it moves to the drain. Next, pour some water onto a kitchen sponge.
 - Which surface that you poured water over would be like the maze with only the road?
 - Which surface you poured water over would be like the rain garden maze?

- How is the rain garden like a sponge?
- Do: "A Crumpled Watershed Model" activity and questions.

Coastal Exploration & Investigations section:

- Watch: "Lady Swan Boat Tour"
 - $\circ\quad$ Draw a picture of what you might see on a boat ride out to an island.

- Watch: Hammocks Beach State Park videos
 - o "Frogs and Toads", "Seashells", "Sea Turtles"
 - O What is something new you learned about the animals that live on our coast?
 - O Why is it important to take care of these animals and their homes?
 - *For additional videos, check out the Hammocks Beach State Park Facebook page. They are posting nature videos and crafts weekly!
- Watch: Jennette's Pier Videos
 - Squid Dissection
 - What kind of animal is a squid?
 - What do squid use their fins for?
 - What do squid like to eat?

What do squid use their ink sac for?
 Beach Explorations
What kinds of shells are common on NC beaches?
What were some bivalves (2 shelled animals) they showed in the video?
What is a fulgurite?
Name your favorite seashell:
 Plankton Investigations
Are plankton able to swim?
What are the two types of plankton?
Why is plankton important?
 Watch & Do: Watch the "Marine Quest QuaranSTEAM" video, do experiments outlined. Have an adult in your home help with the 5 different experiments. If you do not have permission from an adult to do an activity, just watch the video.
O What are water molecules made of up?
O What allowed the paper clip to stay on top of the water?
 Why is water considered the Universal Solvent?
 What happened in the experiment when the fresh water flowed into the salty water?
Watch & Do: "Pelican Pete Story Time" & "Pelican Pete Craft"
 What was Pete's favorite food?

- O What was it called when Pete cleaned his feathers?
- o Do: The Pelican Pete Craft
 - Name your pelican!
- Learn more about Brown Pelicans here:
 - https://nc.audubon.org/brown-pelican-3
 - https://www.coastalreview.org/2017/06/birding-banks-brown-pelicans/
 - https://www.allaboutbirds.org/guide/Brown Pelican/id
 - Beacon Island: https://www.nccoast.org/project/beacon-island/

Oysters section:

- Watch: "Oyster Display at Down East Earth Day"
 - O What other animals were in the oyster tanks?
 - What was different about the tank with the oysters vs. the one without the oysters?
- Watch & Do: "Oyster Story Time" and craft
 - O How did Chester and Meredith oysters help save the water?
 - O Were the grasses sick at the end of the story?
 - O What were some other animals in the story?

Estuaries and Living Shorelines section:

- Do: Print "Salt Marsh Data Sheet" and circle any animals or plants you see while watching the videos below.
 - Watch: "Waters of Life" and "Aqua Kids visit the Rachel Carson Reserve"
 - Why are estuaries so important?
 - What are some animals found in an estuary?
 - What is brackish water?

- Which plant did the Aqua Kids eat in the salt marsh?
- Watch: "Living Shoreline Construction at Trinity Center" and "Living Shoreline Life"
 - O What is a living shoreline?
 - What did they use to build a living shoreline in the video at Trinity Center?
 - O Why did they use recycled oyster shells?
 - O What kinds of animals can live in a living shoreline?
- Do: Estuary Escapades Activity Pages
 - O What is an estuary?
- Do: Living Shoreline Coloring Page
- Do: NC Coastal Reserve Estuary Coloring Book
- Do: NC Coastal Reserve- Estuary Activity Book

Marine Debris section:

- Watch: NOAA Marine Debris Program videos
 - O What is Marine Debris?
 - O What are some impacts of marine debris?
 - O What are some things we can do to reduce marine debris?
- Watch & Do: "Rubber Band Game"
 - O Did you escape from the marine debris?
 - Can animals who are entangled in marine debris still be affected even if they escape? How so?

- Watch: "Crab Pot Videos"
 - Why are abandoned crab pots dangerous to wildlife?
 - Why did the watermen want to help remove the crab pots?
- Watch: Boys & Girls Club Public Service Announcement
 - What are some ways we can help keep the water and beach clean?
- Optional: Walk around your yard to collect and throw away any trash you may see.
 Download and use the Marine Debris Tracker App to record data on your findings. Be sure to practice safe social distancing and stay at least 6 feet away from others. Use the "Marine Quest- Turtle Trash Collectors" program to submit photos of trash you find for badges.