The Center for Alaskan Coastal Studies is a non-profit organization whose mission is to foster responsible interactions with the environment and to teach about marine and forest ecosystems.

First organized in 1981, we have provided outdoor educational programs for Alaska’s schools, teachers and the general public for 20 years. Our programs have been recognized for excellence by both the National Science Teacher’s Association and the Alaskan Department of Fish and Game.
Harbor Etiquette

~ Make sure to leave a clear pathway on the dock for the other people using the dock. The harbor is a home and workplace for many people.

~ When viewing creatures attached to the underside of the dock make sure to position yourself in a safe and stable position. The lower to the dock the better. It is highly recommended that you lay on your belly for the most stable position. Parents should consider putting life vests, provided by Harbor, on young children.

~ Do not pull off any organisms tightly attached to the docks.

~ Organisms taken from the water should be kept moist; consider putting the organisms in water-filled, clear containers for convenient viewing. After viewing creatures, make sure to return them to area that you collected them from.
Creatures of the Dock

In the 1950's, the first road to Homer was built. As a result of the building project there was an abundance of large equipment in Homer that no one wanted to haul back up the new road to Anchorage. With the entrepreneurial spirit of the locals, the road building equipment didn't sit long before it was put to work carving the first Homer Harbor.

Since then the Homer Harbor has had many "lives" due to better understanding of sedimentation, earthquakes and the community and growing industries.

The current harbor provides a window into the life of many residents of Kachemak Bay. Today we will be focusing on the lives of the creatures that live underwater and on or in-between the pilings and floating docks of the Homer Harbor.
Circle or Color Creatures
Seen on Your Dock Walk

Drawing Page

Draw what you think the Homer Harbor looks like if you were standing underwater on the bottom of the Harbor.
List 5 more creatures you saw on your dock walk.

1.
2.
3.
4.
5.
Tides

~ Tidal range is measured vertically. If a pole was placed in the intertidal zone in Kachemak Bay, the water would move up and down roughly 28 feet, from the highest tide to the lowest tide of the year.

~ The zero-tide level is the average (mean) of the low low tides over the course of a month.

Look at the Tidechart to find the:

- highest tide (in feet) today _____
- lowest tide (in feet) today _____

How many feet was the tidal range today? __________

(If you don't have a tidebook you can look in a local phonebook to find the tidechart. To find Kachemak Bay tides, look under the Seldovia section.)

Jellyfish or Sea Jellies

Some of the best places to watch the jellyfish pulse through our waters are from docks and harbors. Can you find the two major kinds of jellies???

- **Hydromedusa** - Usually less than 4 inches across with a rim inside margin of the bell.

- **Scyphomedusa** - Regularly exceeds 4 inches with large frilly lobes around mouth.

Do you think that the Lion's Mane Jelly, that can reach 2 feet across with tentacles 8 feet below them are considered plankton??

Did you find a globular jelly? What was it's name? _______________
Food Chains

Can you link the pictures below into a food chain involving a surfbird, a common shorebird seen at the edge of the Homer Harbor?

Do you know the difference between a food web and a food chain?

Draw water level on the piling where you think today’s tide is right now.
**Plankton**

~ Plankton is the, often microscopic organisms, that are suspended in the water and either drift with the current or swim weakly.

~ There are two major kinds of plankton:
  - **Zooplankton** - the animal plankton
  - **Phytoplankton** - the plant plankton

~ The zooplankton are broken down even further into two groups:
  - **Meroplankton** - organisms that spend only part of their life-cycles in the plankton
  - **Holoplankton** - organisms that are planktonic their entire lives

  Draw any plankton seen on your walk.

**Phytoplankton**

**Zooplankton**

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**Seaweeds or Algae**

Draw an alga that you saw on your trip and label the below parts

- **Blade**
- **Stipe**
- **Holdfast**

Can you find brown, green, and red algae...the 3 common groups of algae in the Homer Harbor?