Tales from the Ocean					
KNOWLEDGE					
Use Arts and Crafts to create a Story Line	<ul> <li>Talk about seasonal changes in the oceans and migrations.</li> <li>Understand predator-prey relationship of different animals.</li> <li>Understand steps we can take to help conserve life in the oceans.</li> <li>Understand the different cause of stress that animals go through every day.</li> </ul> <b>ACTIVE</b> <ul> <li>A variety of arts and crafts</li> </ul>				
ТІМЕ	GROUP SIZE	LOCATION	GRADE LEVEL	EQUIPMENT	
As long or short as you'd like.	Individual or in Pairs	Classroom	K-2	Paper / Construction paper Pencil crayons / markers Any other available craft supplie	Glue stick s
DEBRIEF/REFLECTIVE COMPONENT			HELPFUL TIPS		
<ul> <li>How does the ocean change from season to season?</li> <li>What do animals do in response to this change?</li> <li>Why do some animals have long migrations, and some do not?</li> </ul>			Some ideas the kids have to help keep marine life healthy could include; throwing trash in the garbage can, and recycling in the recycling, or bringing lunch to school in reusable containers		



## OCEAN LITERACY PRINCIPLES

- 5 The ocean supports a great diversity of life and ecosystems.
  - a. Ocean life ranges in size from the smallest living things, microbes, to the largest animal on Earth, blue whales.
  - c. Most of the major groups that exist on Earth are found exclusively in the ocean and the diversity of major groups of organisms is much greater in the ocean than on land.
  - d. Ocean biology provides many unique examples of life cycles, adaptations, and important relationships among organisms are much greater in the ocean than on land.
  - e. The ocean provides a vast living space with diverse and unique ecosystems from the surface through the water column and down to, and below, the seafloor. Most of the living space on Earth is in the ocean.
  - f. Ocean ecosystems are defined by environment factors and the community of organisms living there. Ocean life is not evenly distributed through time or space due to differences in abiotic factors such as oxygen, salinity, temperature, pH, light, nutrients, pressure, substrate, and circulation. A few regions of the ocean support the most abundant life on Earth, while most of the ocean does not support much life.
  - g. There are deep ocean ecosystems that are independent of energy from sunlight and photosynthetic organisms. Hydrothermal vents, submarine hot springs, and methane cold seeps, rely only on chemical energy and chemosynthetic organisms to support life.
  - h. Tides, waves, predation, substrate, and/or other factors cause vertical zonation patterns along the coast; density, pressure, and light levels cause vertical zonation patterns in the open ocean. Zonation patterns influence organisms' distributions and diversity.
  - i. Estuaries provide important and productive nursery areas for many marine and aquatic species.

## Setup

- 1. Have students recall what they learned during the program (or from class about the marine animals which inhabit the oceans
- 2. Brainstorm places that a Salmon, or Grey Whale (or another animal) may have visited during their ocean migration, and what animals they may have encountered along the way
- 3. Consider the food they eat, where they live, predators they may deal with, and the dangers that they may face in their day-to-day lives.
- 4. Have the students work individually or in pairs to then create the own story about the migration of the chosen animal.



- 5. Have students devise conservation messages, something that would highlight steps they can take towards helping marine animals stay healthy (e.g. throwing trash in the garbage can, or bringing lunch to school in re-usable containers)
- 6. You can choose to write the stories on a post card and mail them to the aquarium, or display them in class
- 7. Kids can draw on the front of the post card in any ocean themed manner they choose.

