

Who's Right For This Job?

Notes	<ul style="list-style-type: none"> Created for students 4th-6th grade Supplements any of the science kits and can be adjusted to focus on various careers in the field of science and science education Takes approximately 2 to 3 class sessions of 45 minutes each Uses science notebooks http://www.sciencenotebooks.org 		
Big Ideas	<ul style="list-style-type: none"> There are many careers that revolve around estuary science education. 		
Essential Questions	<ul style="list-style-type: none"> What are some careers that contribute to estuary science education? What skills are necessary for different estuary careers? 		
GLE Ties	<p>Science 3.2.3-Applying Analyze the use of science, mathematics, and technology within occupational/career area of interest.</p> <p>Writing 2- The student writes in a variety of forms for different purposes</p> <p>2.1 Adapts writing for a variety of purposes 2.2 Writes for different purposes 2.3 Writes in a variety of forms 2.4 Writes for career applications</p>		
Vocabulary	Director of Operations	Water Quality Researcher	Education Director
	Graphic Arts Designer	Accountant	Marine Biologist
	Eelgrass	Estuary	Intern
	Glossary		
Possible Misconceptions	<ul style="list-style-type: none"> Only marine biologists have careers related to estuaries. Science is the only skill necessary to work in the estuary education field. 		

<p>Instructional Strategies</p>	<ul style="list-style-type: none"> • Science Notebooking (see the following site for details) http://sciencenotebooks.org • Internet research (Optional) http://scilib.ucsd.edu/sio/guide/career.htm http://stats.bls.gov/oco/oco1002.htm http://www.uhs.berkeley.edu/Students/CareerLibrary/Links/occup.cfm • Outlining/paragraph writing • Individual sharing of results • Group discussion and collaboration
<p>Assessments</p>	<ul style="list-style-type: none"> • Student notebooks • Notes on students' logistical reasoning and communication skills based on presentation
<p>Lesson Description</p>	<p><u>Materials</u></p> <p>Teacher:</p> <ul style="list-style-type: none"> • "launch activity" script <p>Per Student:</p> <ul style="list-style-type: none"> • journal • pencil • "who's right for the job?" worksheet http://www.padillabay.gov/lessons/JobsWorksheet.pdf • internet access (optional) <p><u>Procedures</u></p> <p style="text-align: center;"><u>Pre-Lesson Preparation/ Teacher Background Information</u></p> <ol style="list-style-type: none"> 1. The introduction of this lesson is being taught with the assumption that your students are going to, or have been to the Padilla Bay Breazeale Interpretive Center. If you are unable to take advantage of Padilla Bay's resources, you can adapt the script to fit an aquarium or other marine education facility. If you are unable to take a field trip to a location like this one, consider a virtual field trip using the internet.

Web Resources:

<http://www.seattleaquarium.org>

<http://www.pdza.org>

<http://vanaqua.org>

Introduction

2. Read aloud to your students the following script describing an imaginary visit to an Estuary Interpretive Center. Let them know that while they are listening, they should think about the “behind the scenes” efforts that made this visit possible. Ask the students to list in their journals all the estuary center careers they can think of that make this trip possible.

Script:

You get off the bus and walk towards the interpretive center’s front door. On your way there you notice the landscaping with beach grasses, shrubs, and mixed with shells. You enter the door to the front office and are greeted by a cheerful woman behind a desk. You admire the Estuary tee shirts and book bags that are for sale in the office. They feature lovely pictures of a crab or Great Blue Heron. As you walk into the main room of the interpretive center you learn about estuary plants, animals, and ecological issues from informative signs. Next, you enter the room beyond and are interested in the two giant saltwater aquariums. You talk briefly with an AmeriCorps intern who is cleaning a fish tank. You are fascinated by the information the intern tells you about how the plants and animals in the tank are collected and taken care of, and about scientists that come to the center to learn how the estuary works. You continue to explore the room, discovering many books, a sensory touch wall, and a felt board with fun felt plants and animals. Then it’s time for a class about crabs. After an hour you head out of the interpretive center, throw your gum into the garbage can, and set off for home.

3. Have students reflect on their own and read over their list, then

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have students share in small groups and tell students to add more ideas to their lists, finally have students share with the whole class and build a list of careers. Students should make sure their lists are complete based on the class discussion. According to the paragraph, this list may include: receptionist to supervise the front desk, graphic designer to design estuary merchandise, exhibit designer and staff to post informative signs, development staff to raise money for building exhibits, maintenance staff to keep the center clean and operating safely, interns and education staff to develop and present programs, a research coordinator to organize and facilitate scientists studying estuary health.

4. Ask students to list any other jobs they think are important to the Center that may not have been mentioned in the paragraph you read. Some other careers that are involved with the center include: Architects, cartographers, Geographic Information Systems (GIS) who design and create computerized maps, marine biologists, boat operators, accountants, laboratory technicians, and web developers.

Investigation

5. Tell students that they are going to be thinking about the skills that are necessary for these different related careers. Let them know that they are going to be filling out a research packet that lists skills and job titles (see end of lesson). For each job title, they should choose two to four skills from the list they think would be most valuable. In order to learn more about each job students may use the Internet to research. They can also work with partners or small groups.

Summary

6. Ask Students to share their written comments. Encourage discussion by asking if anyone wants to discuss accuracy or wants to add on to what another person/group shared. Realize that answers may vary. **Accurate research and logical reasoning are more important than consensus on this activity.** Be sure to have a discussion with your students about how to appropriately add on or provide

Lesson Description	other information to a group's sharing. Perhaps it would be best to add these ideas in writing or pose all suggestions as questions to allow the group to respond and explain their ideas.
Adaptations	<ul style="list-style-type: none">• Have struggling students work in a teacher guided small group on the independent activity, or with a partner.• Have high achieving/quick finisher students try to brainstorm other estuary related jobs and skills that would be most valuable for those jobs. Perhaps have these students select one of the careers that they find most interesting and find out what type of schooling and/or training they would need to be able to work in this type of career.