

## ***Ocean Literacy Survey***

*Please respond to all questions. You will not be penalized for incorrect answers.*

***Name:***

### ***Educational Demographics:***

Year: a) Freshman    b) Sophomore    c) Junior    d) Senior

College (in NCSU):

- |                      |                      |                     |
|----------------------|----------------------|---------------------|
| a) CHASS             | b) Ag & Life         | c) PAMS             |
| d) Management        | e) Education         | f) Engineering      |
| g) Natural Resources | h) Design            | i) Undecided or FYC |
| j) Textiles          | k) Lifelong Learning | l) Other            |

What is the main reason you are taking this oceanography course?

- a) this particular course is required for my major
- b) this course fulfills general education requirement
- c) simple curiosity and/or personal interest
- d) other \_\_\_\_\_

### ***Sources of Information:***

Circle the two or three ways you have learned most about the ocean (before this class):

- a) formal education: a whole course in ocean science
- b) formal education: just touched on ocean science in other courses
- c) informal education: aquariums and museums
- d) informal education: a camp or the Ocean Science Bowl
- e) personal experience: actually going to the beach
- f) friends and family: in conversation
- g) media: TV, magazines, etc
- h) other: \_\_\_\_\_

If the media are an important source of information, please list a few examples below:

Circle the range of numbers that best represent the how many times each year you visit the beach or shore.

<1    1-3    4-10    10-20    20-50    >50

How many times each year do you visit an aquarium, zoo or museum where you might learn about the ocean?

<1    1-3    4-10    10-20    20-50    >50

### *Attitudes about the Ocean and Oceanography*

Here are a number of statements that may or may not describe your beliefs about learning oceanography. You are asked to rate each statement by selecting a number between 1 and 5 where the numbers mean the following:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

Choose one of the above five choices that best expresses your feeling about the statement. If you don't understand a statement, leave it blank. If you have no strong opinion, choose 3.

- \_\_\_ My actions can have a significant effect on the health of oceans and coastal areas.
- \_\_\_ I have a personal responsibility to work for the health of the oceans and coastal areas.
- \_\_\_ I am familiar with the environmental issues facing the coastal areas in my home state
- \_\_\_ I have enough background knowledge to write a substantive letter to my congressional representative about an issue affecting the ocean.

*(Following statements are from the Colorado Learning Attitudes about Science Survey)*

- \_\_\_ Knowledge in oceanography consists of many disconnected topics.
- \_\_\_ I find that reading the text in detail is a good way for me to learn oceanography.
- \_\_\_ I cannot learn oceanography if the teacher does not explain things well in class.
- \_\_\_ I study oceanography to learn knowledge that will be useful in my life outside of school.
- \_\_\_ Nearly everyone is capable of understanding oceanography if they work at it.
- \_\_\_ To understand oceanography I discuss it with friends and other students.
- \_\_\_ The subject of oceanography has little relation to what I experience in the real world.
- \_\_\_ To understand oceanography, I sometimes think about my personal experiences and relate them to the topic being analyzed.
- \_\_\_ When studying oceanography, I relate the important information to what I already know rather than just memorizing it the way it is presented.

***Understanding the Ocean*** (multiple choice and short answer mixed together)

*Size of the Ocean*

- 1) How deep is the ocean, on average?  
a) 100 yards                      b) 1 mile                      c) 500 meters                      d) 4000 meters  
e) 20,000 leagues                      f) 6000 kilometers
- 2) What familiar size or distance is similar to the depth of the ocean?
- 3) The surface of a basketball has bumps and grooves that at their deepest may be about 1 mm deep. If the ocean were 1 mm deep, how big would the earth be?  
  
a) size of a baseball                      ( 73 mm diameter)  
b) size of the basketball                      (243 mm diameter)  
c) could just fit under the hoop                      (3 m high)  
d) as big as the stadium                      (250 m across)
- 4) How much of the Earth is covered with ocean?
- 5) What fraction of the total water on earth is in the ocean?
- 6) Is the draining of your kitchen sink affected by the earth's rotation?
- 7) Why or why not?

*Oceans and Life*

- 8) Where is a greater diversity of living organisms found?  
a) on land                      b) in the ocean                      c) both equally
- 9) What produces most of the earth's oxygen?  
a) forests                      b) plants in the ocean                      c) both equally
- 10) What would the earth be like without an ocean?

*Coastal Processes*

11) What is the essential nature of barrier islands?

- a) stasis and stability      b) motion and change

12) In general, what is the effect of human attempts to stabilize the shoreline?

- a) increased erosion      b) decreased erosion      c) no effect

*Oceans and Humans*

12) Describe a few ways scientists study the ocean.

13) What causes the **most** ocean pollution?

- a) oil spills at sea      b) litter from beaches      c) runoff from land

14) List 2-5 ways your actions affect the ocean.