

Aquarius Mission Field Guide

for elementary students

activities to accompany “Science Under
the Sea: Philippe Cousteau Live from
Aquarius,” webcast August 25–26, 2005

Student _____

Class _____

Credits

This student field guide for the “Science Under the Sea: Philippe Cousteau Live from Aquarius” was developed by Melinda Fitzgerald and Kelly Sears of Smith Middle School, Chapel Hill, North Carolina, and produced by LEARN NC at the University of North Carolina at Chapel Hill.

This publication is intended for students in grades 3–5 participating in live webcasts scheduled for August 25–26, 2005. It may be freely reproduced for noncommercial use.

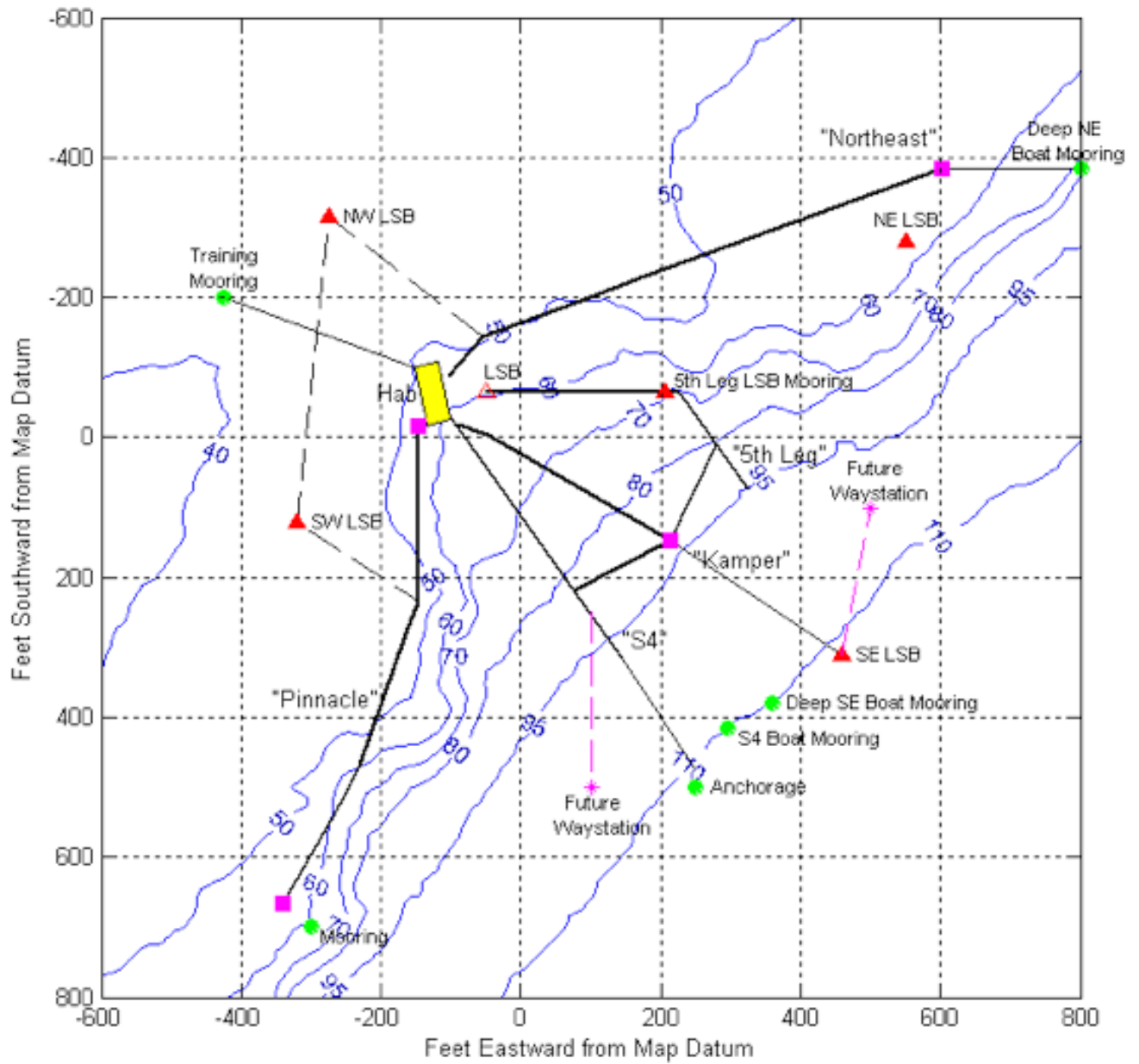
Learn more about Science Under the Sea at www.scienceunderthesea.org.

Marine Ecology Vocabulary

Aquarius	
climate change/ global warming	
coral	
coral bleaching	
coral reef	
ecosystem	
filter feeder	
food chain	
habitat destruction	
mangrove forest	
marine ecologist	

marine ecology	
non-point source pollution	
point source pollution	
predators	
prey	
salinity	
seagrass community	
sponges	
turbidity	
zooxanthellae	

Map of Aquarius Habitat



Organisms and Habitat Field Notes

Name of organism	Location where it was found	Qualitative (five senses)	Quantitative (number found)

Sketches of habitat and organisms	Questions for later
--	----------------------------

Journal prompts

1. How has your knowledge of coral reefs changed since we began this unit?
2. You are a scientist on Aquarius. Create a journal of your day's work and activities.
3. Choose an organism that you identified living around Aquarius. Writing as that organism, describe how your home has changed in the past few years.
4. Create your own journal prompt. (See the teacher for approval prior to writing your prompt.)

Sustainable Practices Ad

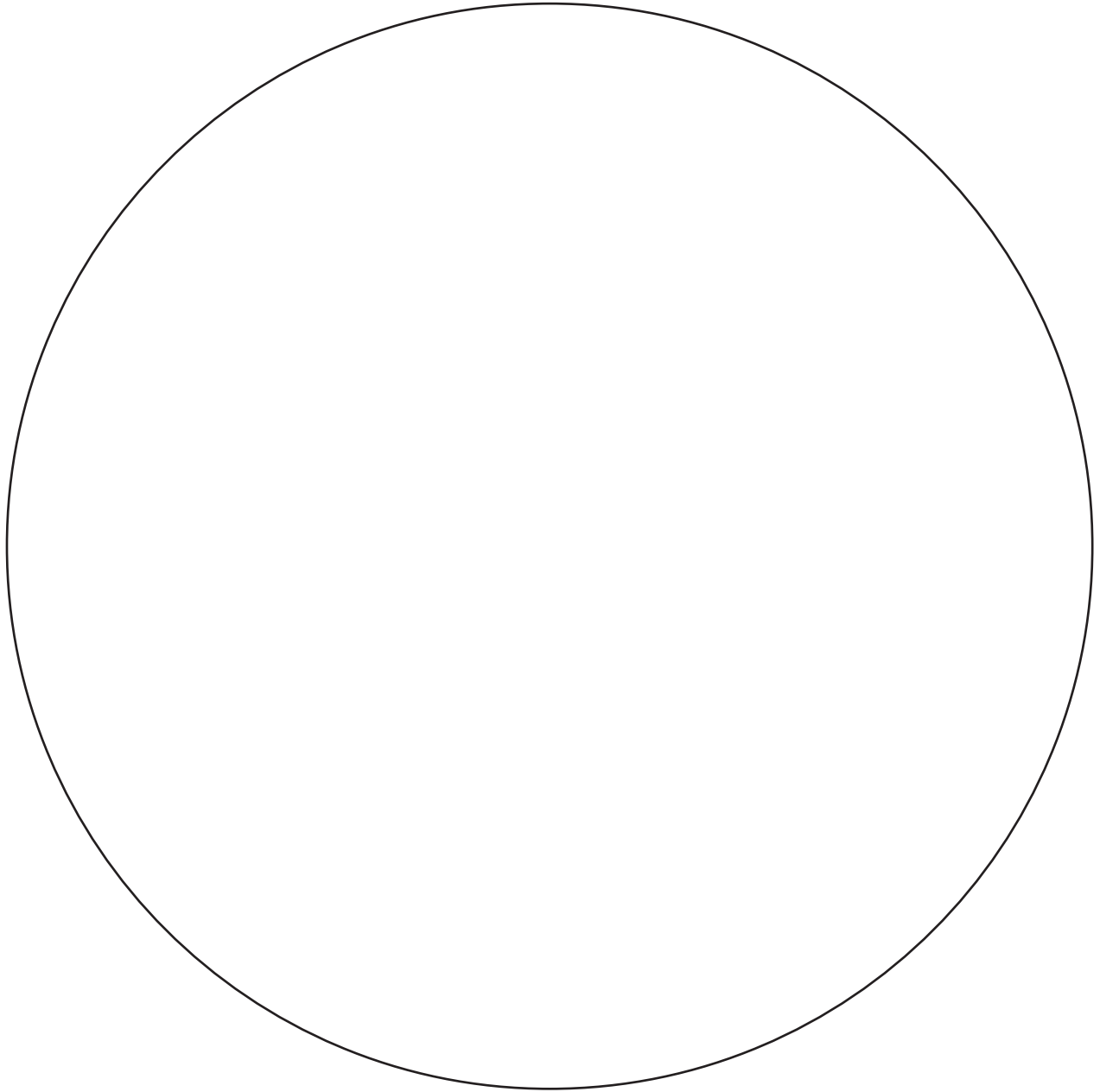
Make an advertisement to encourage sustainable practices. This should include a creative educational message that promotes practices that protect our environment.

Family Graffiti Page

Step #1. Develop 4 questions to ask your family about coral reef habitat destruction. Write your questions in the circle below.

Step #2. Share what was discussed in today's seminar.

Step #3. Have each family member respond to your questions below.



Observations

Qualitative data

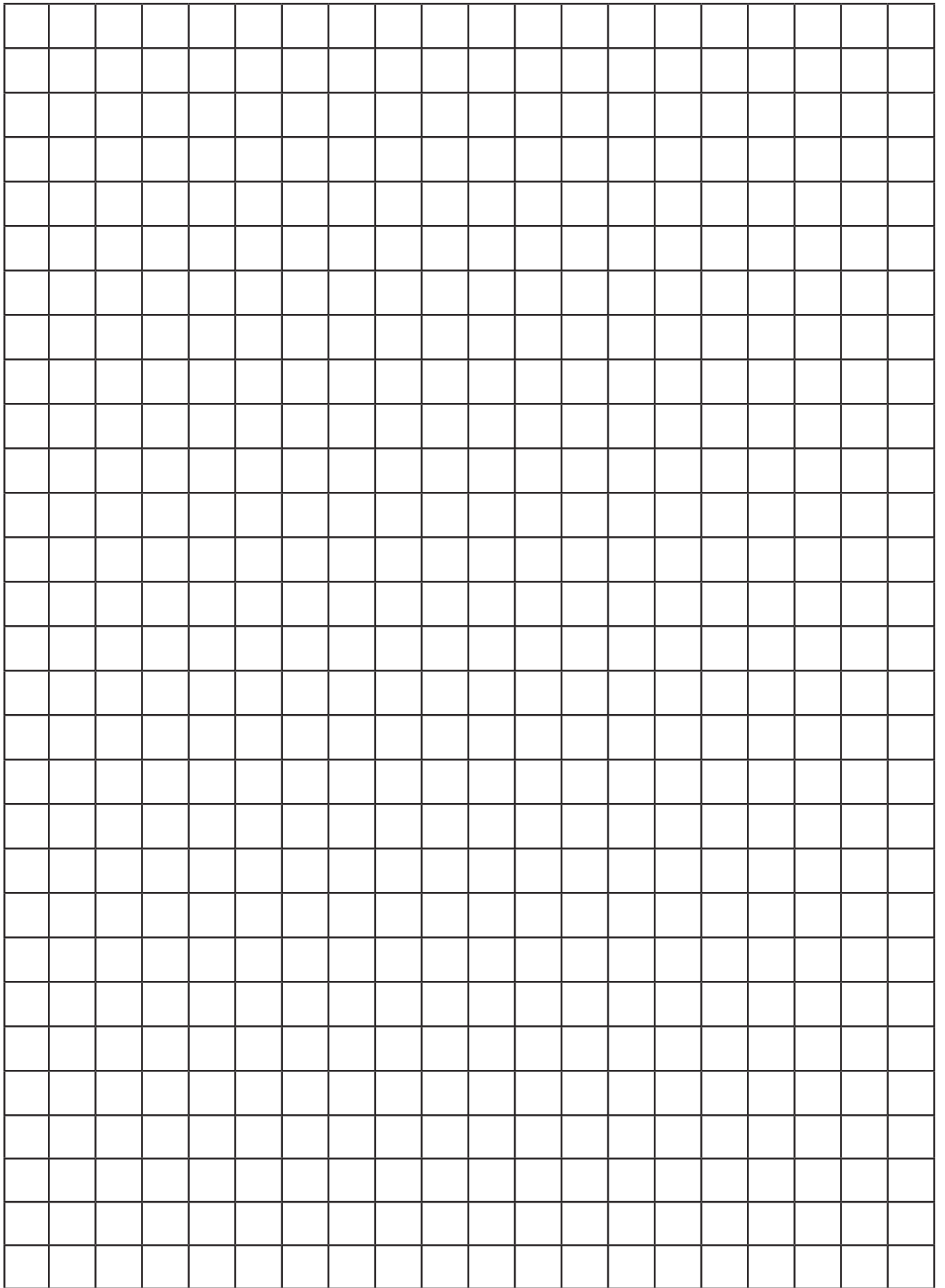
What do you observe with your five senses?

Quantitative data

Using a ruler, draw a data chart below to organize your data collection. Label all rows and columns so it is clear what you will write in each box. Attach separate pages if necessary.

Conclusion

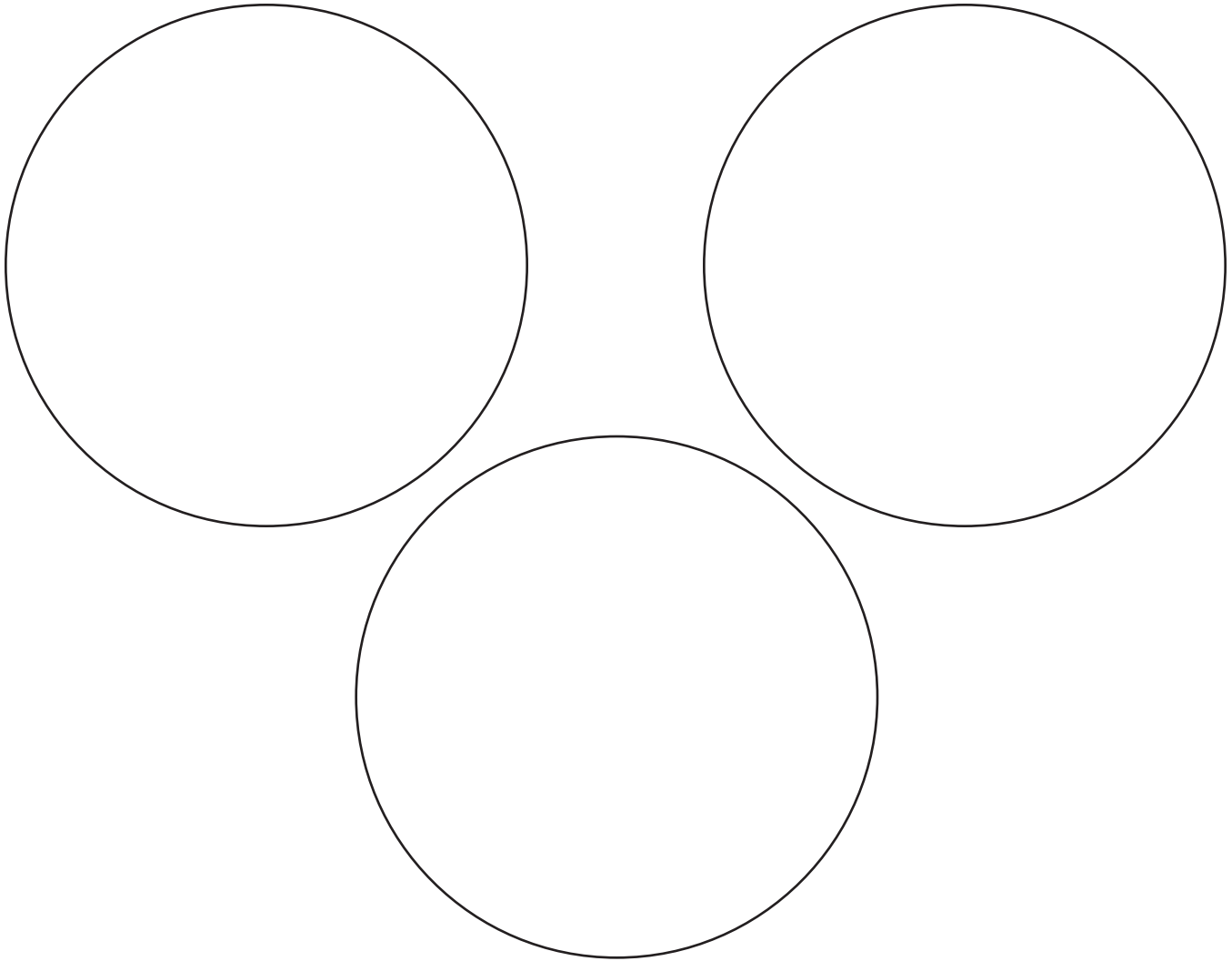
Carefully analyze your data to determine what it is telling you. How can you answer your question?



Journal Activity

Create a marine ecology question that you would like to discuss with others. Ask three other students to respond to your question in each circle and reflect on their responses below.

Question _____



Reflect on the other students' responses. Use the back of this sheet if necessary.

Marine Ecology Crossword

Across

1. The amount of dissolved salts in water
2. A tropical inshore habitat made up of several species of trees or shrubs that grows in salt water
3. A rock-like structure built over thousands of years by tiny coral that creates homes for thousands of plants and animals
4. A person who studies marine organisms and the marine environment in which they are found
6. Small ant-sized marine organism that often lives in colonies
9. An animal that lives by eating other organisms
10. Animals that obtain their food by filtering particles out of the water
11. Simple multicellular filter feeding marine organisms
12. An animal that is hunted for food
13. The study of how animals live together and how the animals use their environment
14. Small algae that live within the tissues of coral

Down

1. Shallow sea bottom areas covered by flowering plants that have adapted to live underwater
5. The destruction of the places where animals live through human impact or natural disasters
7. An underwater research facility where scientists can conduct research on the marine ecosystem
8. Cloudiness and color in water due to the presence of small particles like dirt, soil, sand, and algae

