#### **Science Interests Inventory**

Name:\_\_\_\_\_ Date:\_\_\_\_\_

This will help you to explore your interests in science.

#### Check all that apply:

- 1. Think about exploring. Do caves, gems, stones, volcanoes, or earthquakes interest you?
  - \_\_\_\_\_I like the idea of rock climbing or exploring caves.
  - \_\_\_\_\_Whenever I find pictures of volcanoes, I stop, look, and wonder about them.
  - \_\_\_\_\_I find earthquakes and the damage they do to be really mysterious.
  - \_\_\_\_\_I like the idea of collecting unique rocks and stones.

## Count your check marks and write the Total for #1 here:\_\_\_\_\_

2. Think about the sky. Does the weather and how the air always changes interest you?

- \_\_\_\_\_When I wake up in the morning, I check the weather to determine what to wear.
- \_\_\_\_\_During lightning or thunderstorms I like to watch the lightning, rain or snow.
- \_\_\_\_\_I look at clouds and think about where they came from and what they mean.
- \_\_\_\_\_Tornadoes and hurricanes are fascinating.

## Count your check marks and write the Total for #2 here:\_\_\_\_\_

3. Think water. What is there about rivers, oceans, lakes, streams, or rain that interests you.

\_\_\_\_\_I like to swim and I would like to scuba dive.

\_\_\_\_\_I like to canoe, sail, or motorboat and explore.

\_\_\_\_\_I like to walk and play in the rain.

\_\_\_\_\_I enjoy fishing or watching fish swim.

# Count your check marks and write the Total for #3 here:\_\_\_\_\_

- **4.** Think animals, fish, people, or plants. What is there about living things that interests you? \_\_\_\_\_\_ I have a pet or pets and I enjoy taking care of them.
  - \_\_\_\_\_I have a garden or work in my family's garden.

\_\_\_\_\_I enjoy visiting the zoo, aviary, or botanical gardens.

\_\_\_\_\_I would like to dissect an animal and understand how its organs work.

Count your check marks and write the Total for #4 here:\_\_\_\_\_

Imagine yourself becoming an Earth system scientist. Which of the following global problems interest you the most? Write in the number that describes what you think about being on a team that tries to solve each problem.

- 1= I would *not* enjoy working on this team at all
- 2= I would enjoy working on this team **a little**
- 3= I would enjoy working on this team *a lot*
- 4= I would enjoy working on this team *a whole lot*
- \_\_\_\_5. Inventing food crops for farmers that will resist disease.
- \_\_\_\_6. Studying and predicting the behavior of a volcano that is threatening a city or town full of people and animals.
- 7. Trying to figure out how weather patterns like hailstorms, heatwaves, or frosts form and then to make recommendations to farmers about when and where to plant things or protect their crops.
- 8. Examining water to find out what new chemicals might be in it, and then figuring out where they came from and what affect they might have on the water's quality.
- 9. Studying natural hazards such as insect-borne diseases or overpopulation of predators to find out how to help humans who are suffering.
- 10. Exploring and finding new sources of natural resources, such as drinkable water, oil, natural gas, and important metals or gems.
- \_\_\_\_11. Studying how factory and automobile emissions are changing the air we breathe.
- 12. Studying what man-made things like businesses are doing that affect the water cycle: water evaporates, forms clouds, returns as rain, is transported via streams and rivers, and is stored in oceans or lakes.

### Which of the following topics would you like to learn more about?

- 1= I would *not* enjoy learning about this topic at all
- 2= I would enjoy learning about this topic *a little*
- 3= I would enjoy learning about this topic *a lot*
- 4= I would enjoy learning about this topic *a whole lot*
- \_\_\_\_13. Plants which can be used to make medicine
- 14. What a particular kind of soil is made of and how it might be made better for plants or food crops.
- \_\_\_\_\_15. Air pollution and how we might fix it.
- 16. The composition of the ocean's waters and how we could alter them to conserve the Earth's resources
- \_\_\_\_\_17. New types of organisms that live in oceans, streams or lakes
- \_\_\_\_\_18. What makes a continent move, or a mountain form?
- \_\_\_\_\_19. The ozone layer and what it does for the Earth and its inhabitants.
- \_\_\_\_\_20. What effects will shrinking glaciers have on the oceans ?

## As an Earth system scientist, you might have one of the following jobs. For each job, rate how much you would like to have that job.

- 1= I would *not* enjoy having this job at all
- 2= I would enjoy having this job *a little*
- 3= I would enjoy having this job *a lot*
- 4= I would enjoy having this job *a whole lot*
- \_21. **Biological ecologists** study how humans interact with other living things as they try to design better places to live, as they discover new animals and try to save them, and as they try to protect the environment from pollution.
- 22. Seismologists study the how and why and what of earthquakes, and they analyze the earthquake's tremors to try and understand the structure of the Earth's plates and core.
- 23. **Atmospheric scientists** study weather's processes; the global dynamics of climates and how they change; what solar radiation is and how it effects the air's gases; and the role of atmospheric chemistry in ozone depletion, climate change, and pollution.
- 24. **Hydrologists** are concerned with the Earth's water from the moment of precipitation until it evaporates into the atmosphere or is discharged into the ocean; for example, they study river systems to predict what affects a flood might have on a particular place..
- 25. **Paleoecologists** study ancient organisms like dinosaurs, or now-fossilized miniature bugs and plants, and the history of their relationships to their environment.
- \_\_\_\_\_26. **Mineralogists** study how rocks and metal deposits are formed underground, and where to find them.
- 27. **Environmental Meteorologists** study the concentration and movement of air pollutants
- 28. **Marine geologists** study the processes that lead to the formation of the ocean's basins, and the ways in which geothermal and other geological processes interact with seawater.
- Now go back through these pages and write in the number for each item in the blanks below. For example if you marked "3" for item 17, then write "3" in the box under Score next to the number 17. Add the numbers in each column to get your total interest in each sphere.

Question	Score	Question	Score	Question	Score	Question	Score
1.		2.		3.		4.	
5.		6.		7.		8.	
9.		10.		11.		12.	
13.		14.		15.		16.	
17.		18.		19.		20.	
21.		22.		23.		24.	
25.		26.		27.		28.	

Total:	Total:	Total:	Total:
Biospher	re Lithosp	here Atmosp	here Hydrosphere