ECHOn’s Entryway (1st floor)

1. To the right of the bathrooms underneath the stairs is a sign that describes LEEDS. What does LEEDS stand for?

2. What are two decisions ECHO made to earn this important certification?

Into the Lake (1st floor)

3. An invasive species is a plant or animal that does not belong in the lake AND causes damage to the lake. Name one invasive species that is in Lake Champlain.

4. Why is this invasive species a problem in Lake Champlain?

5. Zebra mussels have become a Lake threat since their discovery in 1993. Issues include competition for food with native mussels, destruction of historic shipwrecks and clogging water pipes. After reading about zebra mussels, write one idea you have for removing them from Lake Champlain.

Lake Champlain Basin Program Resource Room (top floor across from the Sea Tank)

6. Ask a staff person in the Resource Room to tell you about some of the invasive species not yet in Lake Champlain that you can help “watch out” for. List two of these plants or animals of concern:

7. What can you do to help keep them out of Lake Champlain?
8. “Leave No Trace” is an important principle practiced by outdoor enthusiasts. Explain what you think this phrase means.

9. Go to the “Be a watershed Weather Reporter” studio. Make your own weather report. What are three measures you can take to help stop pollution from getting in the lake after rainstorms? (hint: pay attention to the weather report script as you are delivering your weather report)

   1._________________________________________
   2._________________________________________
   3._________________________________________

10. The plants and trees that grow along river banks are called buffers. What are three helpful things buffers do?

    1._________________________________________
    2._________________________________________
    3._________________________________________

11. Dairy farming is important to the Vermont economy, but can have a negative impact on the environment. Some dairy farmers have come up with simple solutions to solve big problems. Name one of the solutions some farmers have implemented to eliminate an environmental problem associated with dairy farming.
ECHO Opportunities for Stewardship Trek
Grades 6-8
ANSWERS

2 LEED stands for Leadership in Energy and Environmental Design

3 ECHO made environmentally thoughtful choices for building design and construction like super insulated windows to conserve heat and energy, use of native plants for landscaping, dual flush toilets, innovative building technology, and access to electric car charging stations.

4 Students might mention the water chestnut or Eurasian milfoil that grow out of control and clog the habitat leaving it unusable for native animals, purple loosestrife that crowds out native plants like cattail that are an important food source to native animals, or Alewife that out compete native animals for the available food sources.

5 See above

6 Possibilities include manual removal with specialized equipment around the most densely populated or most sensitive areas such as historical shipwrecks, beaches and water intake pipes, identifying a species of fish or animal that feeds on the mussels and carefully introducing it to the lake environment to control their numbers, or possibly using an organic pesticide if one can be found that doesn't harm native species.

7 Possible answers include European Frogbit, Asian Clam, Asian Carp, Round Goby, Quagga Mussel, Ruffe

8 Possible answers include:
   a. Inspect and remove aquatic plants from boats
   b. Never dump water from one body of water into another body of water
   c. Do not move plants or animals from one body of water to another body of water
   d. Always dispose of unwanted bait in the trash
   e. Learn to identify invasive plants and animals

9 “Leave No Trace” is a set of principles which guide people to make environmentally healthy choices while they enjoy the outdoors. The concept is to leave little or no impact or trace of human presence by leaving outdoor recreation sites in the same or better condition than you found them.
10 Three ways to minimize impact on the Lake after a rain storm include scooping the poop – removing pet waste and putting it in the trash – using less fertilizer on lawns which leach into the water table and choosing detergents with little or no phosphorus content.

11 Buffers do many things for rivers. They act as natural filters so pollution and fertilizers don’t enter the water system. They provide habitat and food for aquatic and land animals. They also help control flooding and erosion.

12 Some farmers have installed simple foot bridges for cows over rivers so that the cows do not break down the fragile banks of the streams with repeated hoof traffic.