



Stream Scene

Classroom Program for Grades 3-5



Program Description: Discover ways to determine the health of a stream by its inhabitants. See unique adaptations of animals that live their life in cold mountain streams when you become stream creatures as we play a game of understanding and find out how things in and around the stream can change its ability to support life.

Lesson: Learn about animal adaptations for survival in freshwater streams and the role of indicator organisms in assessing water quality.

Conservation Message: An impact on any element of an ecosystem has ramifications throughout the ecosystem.

Curriculum Objectives:

Tennessee students will apply the following **Science Learning Expectations:**

- Recognize that the environment and the organisms that live in it can be affected by pollution.
- Recognize that living things have features that help them to survive in different environments.
- Determine that adaptations help organisms to survive in their environments.
- Investigate the relationships among organisms in a specific ecosystem.

Georgia students will apply the following **Science Performance Standards:**

- Students will recognize the effects of pollution and humans on the environment.
- Students will describe the roles of organisms and the flow of energy within an ecosystem.
- Students will relate how microorganisms benefit or harm larger organisms.

Alabama students will apply the following **Science Course of Study Content Standards:**

- Describe the interdependence of plants and animals.
- Classify animals as vertebrates or invertebrates and as endotherms or ectotherms.
- Describe the relationship of populations within a habitat to various communities and ecosystems.

Additionally, all students will apply the following **National Science Education Content Standards:**

- Develop an understanding of organisms and their environments.
- Develop an understanding of life cycles of organisms
- Develop an understanding of characteristics of organisms.



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Activity Sheet

Complete the following sentences by decoding the underlined mystery words using the code provided below.

1. Fish and other aquatic species need oxygen to live. The oxygen in water is 49191915122254 oxygen.
2. An animal's 812920120 is where it lives finds food, water, shelter and space.
3. 9144931201518 organisms are the most sensitive to pollution. These animals all decline in population when pollution is introduced into a habitat.
4. A 121182215 is an immature form of an organism that is unable to reproduce, lacks wings and appears totally different from the adult.
5. An aquatic animal that does not have a backbone yet is large enough to be seen without the aid of a microscope is a 13131815914225182052181205.
6. When the source of pollution is not easily identified as coming from a particular place or point, it is considered 141514161591420 source pollution.
7. 14251316819 are the immature wingless stage of aquatic insects.
8. Animals require specific conditions in which they live. For example, the environment may contain too much acid. To determine the amount of acidity in the water, measure the 168 on a scale of zero to fourteen with zero being the most acidic and fourteen being the most alkaline or basic. A reading of seven is considered neutral.
9. Anything that harms the environment is known as 16151212 212091514 and can be biological, chemical or thermal.
10. 161591420 source pollution can be traced back a particular point such as a drainage pipe or a ship wreck.

Code

1A	2B	3C	4D	5E	6F
7G	8H	9I	10J	11K	12L
13M	14 N	15O	16P	17 Q	18 R
19S	20T	21 U	22V	23W	24X
25Y	26Z				

