



## Fish Are, What Fish Eat!

### Purpose:

This activity is meant to support at-home learning about environmental pollution and its effects on organisms living within the environment.

### Background Information:

The Bronx River is the only freshwater river flowing through New York City. The river has had a long history of ups and downs, with periods of neglect and preservation. Throughout the 1800's, the river's water flow helped power mills and industry such as textile, pottery, paints, and flour. Although this helped the Bronx industry prosper, the effects on the environment were detrimental. Run off from these industries often ended directly into the river. Chemicals, dyes, and particulates were flushed into the river with little precaution to the environmental effects. For years after into the 1980's, the river had become a sort of dumping ground and even declared a "toilet bowl" by elected officials. If it was not wanted, it was thrown into the river. For years persons from the community would throw refrigerators, tires, cars, ovens, carriages, etc. directly into the river. In the 1990's, concerned persons of the community banded together and decided that they would take the river back and restore it. This group became known as the Bronx River Working Group, the parent group to the Bronx River Alliance. Community activism became an important aspect of the river and its health. Through education and ecological restoration with the community of the Bronx, the river gets healthier with each passing day. The river still has a long way to go, and this activity will help students understand that what happens up here on land also affects our friends down by the river.

### Lesson:

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| 5 min | Have a quick discussion using the following prompts:<br>As an introduction, before any information about the River is given, the students will take turns going around the class and answer one of the following questions (or one relatable):<br>When I say "river" what do you think of?<br>When I say "green" what do you think of?<br>(words to insert on right panel.)<br>- We want each student to answer a different environmental based question and what it means to them. This allows the students to relate their feelings and what they think to environment, something that students in the city are not often exposed to. Also, there are no | Environment<br>Sky<br>Animals<br>Water<br>Forest<br>Flower<br>City<br>Etc. |
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|        | wrong answers. We want to encourage the students to say anything.  |  |
| 5 min  | This is how the game works:<br><br>The students will pretend that they are fish within the Bronx River that are very hungry and ready for lunch. Students will be asked to look in their kitchen and find a few items that are the following colors:<br><br>Blue, Green, Black, Red, Orange, White, Grey, and Brown. |  |
| 5 min  | Once the items have been tallied, have student share their findings! How many students saw a lot of red items in their kitchen? How about white? And so on.  |  |
| 10 min | The student with the most of each color will then get to read what that colored item represents from the list below:   |  |

**Blue:** Salt that flows into the river after a snow melt in the winter

**Green:** Chemicals and medicine that was flushed down the toilet

**Black:** Oil that leaked into the water by cars that are getting fixed near the river

**Red:** Plastic that has been thrown in the street and has ended up in the river

**Orange:** A net that has been left in the water by a local fisherman

**White:** A boot left by the river's edge during high tide

**Grey:** A piece of paper that flew out of a student's hand after school

**Brown:** Actual food (Plants, Bugs, Etc)

The last remainder of time will allow for students to converse about what just happened. This activity helps students understand that as animals within the water, they are not aware if something is food or not. All of the things above were added to the water by people within the community, even when they are not near the river's edge. Our actions on land effect the animals within the water, and thus affecting the rest of the environment around them.