ACTIVITY 5.2 – CHANGES IN A FOOD WEB

What Will We Do?
We will describe relationships between different organisms in the Great Lakes, and predict the effects of population changes.

Procedure
Using the Great Lakes food web at the end of this activity, answer the questions about the model food web you made in class with yarn.

1. What organism in the Great Lakes did you represent? ________________

2. If your organism were removed from the food web . . .
   How many organisms would you directly affect? ________________
   How many organisms would you indirectly affect? ________________

Draw three different food chains that would be affected by removing your organism. (Use + or – to show the increase and decrease of the populations.)

Example:

1. Answer will vary
2. Answer will vary
3. Answer will vary
3. Imagine that the lake herring and the lake whitefish have been eliminated from the Great Lakes food web. Use your Great Lakes food web diagram to fill in the following chart to show what organisms would be affected by the removal of the herring and the whitefish.

<table>
<thead>
<tr>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Herring</td>
<td></td>
</tr>
<tr>
<td>Lake Whitefish</td>
<td></td>
</tr>
</tbody>
</table>

4. Why would the removal of the herring and the whitefish affect other organisms indirectly?

5. Do you think any land organisms would be affected by these changes in the Great Lakes? Explain your ideas.

Making Sense

Using the food web diagram of the Great Lakes, highlight (or circle in red) organisms that would have an indirect effect on the trout if something happened to it. Explain your ideas.
Great Lakes Food Web