

Hands - On Science with NOAA

TITLE: Fins, Tails and Scales: Identifying Great Lakes Fish

OVERVIEW: Working with a set of illustrated Great Lakes fish cards, students identify distinguishing characteristics of fish and learn to identify 10 common fish families and how why dichotomous keys are used.

MATERIALS:

Download illustrated fish cards at http://www.miseagrant.umich.edu/flow/U3/U3-L1.html

INSTRUCTIONS:

Part I: Students sort the illustrated fish cards based on the physical characteristics that they choose to get an idea for how dichotomous keys are made and to become more familiar with the 10 Great Lakes fish families.

Part II: Students will use a dichotomous key to sort and identify fish based on the characteristics that ichthyologists, fish scientists, view as important.

SCIENCE EXPLANATION:

Each family of fishes in the Great Lakes region has physical traits that set it apart from others, called distinguishing characteristics. These characteristics help fish survive in their environment. By observing and comparing these features, students learn that fish, like other living organisms, can be organized and classified into meaningful groups for identification and further study.

EXTENSION IDEAS

- Have students create their own dichotomous keys using common household items, other fish or other species.
- Have the students trade the dichotomous keys that they made with each other and use them to identify the household items or other fish species.

EXPLORE FURTHER

Great Lakes Education Resources

http://www.education.noaa.gov/Freshwater/Great_Lakes_Eco-Region.html

Fishes of the Great Lakes

http://www.glerl.noaa.gov/seagrant/GLWL/Fish/Fish.html

http://www.seagrant.wisc.edu/greatlakesfish/framefish.html

