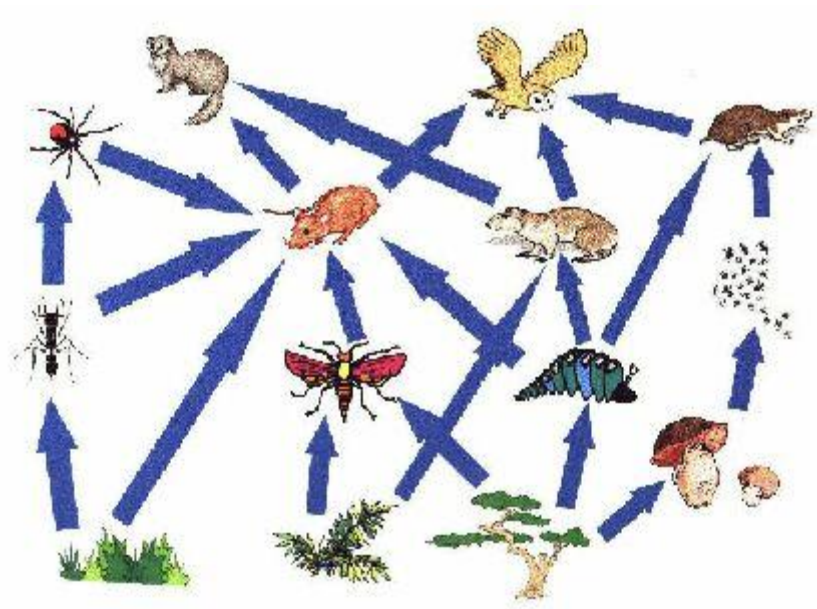


Food Chains Food Webs



Instructional Unit Resource Guide Elementary Level

Based on Principles of Universal Design and Differentiated Instruction

Project Title: Food Chains

Grade Level: Elementary (intermediate)

Focus: Science

Author names: Susan Calabrese, Brenda Christophel, Shawn Dever,
Kelly Stahl, Beth Snively, Karen Turner

Agency/School District: Bartholomew Consolidated School
Corporation / Taylorsville Elementary School

Author's Notes

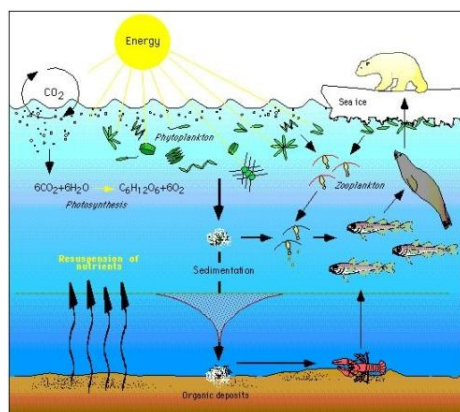
The Universal Design Team at Taylorsville Elementary is comprised of six faculty members. They are all members of the ISD (Instructional Service Delivery) team. Each member has various technological abilities from simple usage of word processors to use of assistive technology in the classroom. Listed below are the names of the members on this team, their position, and how long they have been in education.

Susan Calabrese	5 th grade teacher	13 years
Brenda Christophel	3 rd /4 th grade teacher	25 years
Shawn Dever	6 th grade teacher	16 years
Beth Snively	Special Education teacher	21 years
Kelly Stahl	1 st grade teacher	2 years
Karen Turner	Principal	36 years

This instructional unit is based on exploring the living environment. The intent of this unit is to provide all students with the understanding of the interdependence of organisms in the environment. This unit will take approximately 2 weeks to introduce and will be used to connect all the different organisms as they are discussed individually during the rest of the year.

After this 2 week unit all students will be able to describe that all kinds of animals' food can be traced back to plants. Many students will be able to describe and explain the different types of relationships organisms have with an ecosystem.

Individual teachers can be contacted through the Taylorsville Elementary website located at www.bcsc.k12.in.us/taylorsville.



Standards and Benchmarks

- Science:
 - 3.4.4 – Describe that almost all kinds of animals’ food can be traced back to plants.
 - 4.4.3 – Observe and describe and interact with one another in various ways such as providing food, pollination, and seed dispersal.
 - 4.4.4 – Observe and describe that some source of energy is needed for all organisms to stay alive and grow.
 - 5.4.4 – Explain that in any particular environment some kinds of plants and animals survive well, some do not survive as well, and some can’t survive at all.
 - 5.4.5. – Explain how changes in an organism’s habitat are sometimes beneficial and sometimes harmful.
 - 6.4.8. – Explain that in all environments organisms with similar needs may compete with one another for resources.
 - 6.4.9 – Recognize and explain that 2 types of organisms may interact in a competitive or cooperative relationship.

Resource Help

Indiana Learning Standards: <http://www.doe.state.in.us/standards/>

Planning Pyramid

Some students will know:

Some students will be able to explain how changes in a habitat will directly affect which organisms will survive and the adaptations necessary for survival.

Most students will know:

Most students will be able to describe and explain the different types of relationships organisms have with an ecosystem.

All students will know:

After this 2 week unit all students will be able to describe that all kinds of animals' food can be traced back to plants.

Teacher Library

The following websites will be helpful for teachers as they plan this unit:

www.brainpop.com

- If you are a subscriber, there are many short video clips.

www.pppst.com

- PowerPoint presentations on nearly every topic

http://www.teachnet-lab.org/glasgold/food_chain/introduction.htm

- WebQuest to teach food webs

<http://www.kidwings.com/owlpellets/flash/v4/index.htm>

- Virtual Owl Pellet dissection

http://www.gould.edu.au/foodwebs/kids_web.htm

- Interact with food chains

LEARNER ACTIVITIES

Interdependence of Life

Choose 3 items in a row to complete.

<p>Create</p> <p>Given a list of organisms, create a food web. Use arrows to show the energy flow within the ecosystem.</p>	<p>Write/Draw</p> <p>Collaborate with a partner to create a picture book for a younger student teaching them about a particular habitat and the interdependence of the organisms within it.</p>	<p>Quiz</p> <p>http://www.kidsknowit.com/interactive-educational-movies/free-online-movies.php?movie=Food%20Chains</p> <p>Watch the video and take the quiz. Report your score to your teacher.</p>
<p>Draw</p> <p>Ask your teacher for the name of a biome and draw a food web that would be found in that biome.</p>	<p>Watch</p> <p>Watch a PowerPoint from the website www.pppst.com Then complete a “For Kids” learning activity of your choice.</p>	<p>Create</p> <p>Write a rap, song, or poem from an animal’s point of view within their food web. If they are a predator, describe how they feel as an example.</p>
<p>Read/Write</p> <p>Use vocabulary words to create a crossword puzzle for your classmates to complete.</p>	<p>Read / Summarize</p> <p>Read an article or watch a short video clip about food webs. Write a 1 paragraph summary when completed.</p>	<p>Compare/Contrast</p> <p>Choose similar organisms such as an arctic hare and a rabbit and compare and contrast their roles in their given habitats.</p>

Assessment

What materials and resources will be useful for assessing student knowledge and skills?

- Teacher prepared short quizzes to quickly assess learning
- Use of classroom performance system such as 2KnowToolBar with Neo's or Classroom Performance System to quickly assess
- Completion of activities on Tic Tac Toe Board
- Classroom assessment options listed on the DOE website.

Possible Resources for locating assessment materials:

<http://www.ncrtec.org/tl/sgsp/index.html>

Rubrics:

- <http://rubistar.4teachers.org>
- http://teachers.teach-nology.com/web_tools/rubrics

Authoring Software: <http://www.inspiration.com> (Kidspiration/Inspiration)
http://www.edhelper.com/teachers/graphic_organizer.htm

Test Taking Software: <http://www.quia.com>

Electronic Quizzes:

- http://higher.mcgraw-hill.com/sites/0070947864/student_view0/chapter2/study_quiz_2_1.html (upper grades)
- <http://www.vtaide.com/png/foodchains-mcq.htm>

Modifications: Planning for Academic Diversity

LEARNING BARRIER	POSSIBLE SOLUTIONS	WEB RESOURCES
Student cannot read at grade level.	Let the students listen to an audio or video file of the test/work through I-tunes, Ipod, or Mp3 player.	http://www.readplease.com Use of Read and Write Gold software
Student has difficulty comprehending the material.	Modify the material using the Microsoft Auto Summarize tool	http://www.sparknotes.com
Student has difficulty mastering the vocabulary of the unit.	Use Marzano's vocabulary work to identify certain words to focus on for these students	http://www.enchantedlearning.com/Dictionary.html http://www.webster.com/ www.visuwords.com http://www.visualthesaurus.com
Student has difficulty with handwriting (speed or accuracy).	Use a portable word processor (i.e alphasmart) to help with writing skills	http://www.idictate.com
Student has difficulty with calculating activities.		http://www.webmath.com http://mathforum.org/dr.math/
Student needs help with conducting research.	Send students to a website that will help them find the correct information	http://my.yahoo.com http://toolbar.google.com/ http://yahooligans.yahoo.com/
Student needs the instructional material in a language other than English.	Allow students to speak with others who speak their own language to interpret the conversation	http://babelfish.altavista.com
Student needs additional challenge.		www.google.com www.trackstar.com

Possible resources for developing modifications and accommodations:

Making Modifications in the Classroom: A Collection of Checklists:

http://www.ldonline.org/ld_indepth/teaching_techniques/mod_checklists.html

National Center on Educational Outcomes: <http://www.education.umn.edu/NCEO/>

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