

Food chain lesson plan



**ASSIGN
BUSTER**

" Food Chain Lesson Plan" Week Day Ask the children the leading question " What did you eat for dinner last night?" Ask them to write what they ate as separate ingredients like beef, pasta, bread, rice etc. Then ask them to categorize the food that they ate as: Source of food- Plants or Animals, Fungi (in case of Mushrooms). Introduce the concept of producers- plants, they make their own food by the process of photosynthesis. Introduce the concept of consumers- organisms that eat either the producers or the consumers.

Day 2: Categorize consumers as herbivore, carnivore, omnivore, and detritivore (or decomposers). Ask questions as: Name the animals which that eat plants. Name the animals that eat other animals. Name the animals that eat both plants and animals. Name the decomposers. Explain the importance of decomposers. Explain why plants are essential for us. Ask them to think what will happen if all the plants from the Earth are removed. Who is going to be affected and why? Is life possible without plants?

Day 3: Introduce the concept of food chain. Introduce the concept of source of energy, and how energy flows, sun -> grass-> cow -> human.

Day 4: Introduce activity. Provide the students with a set of cards having organisms, plants and animals. Explain them the colour code, write on the board: green = producers, yellow = herbivores, red = carnivores, orange = omnivores, blue = decomposers. Ask them to arrange as per the food chain.

Day 5: Introduce the concept of food web. How one animal can be eaten up by some other. Ask them to link the organisms, let them run their imaginations and should come up with the answers. Give them home work to think how animals and plants could be related with each other in one chain or in multiple chains forming a web called food web.

Week 2 Day 1: Introduce the concept of energy. Ask the students why there are more grass and trees

then animals? For e. g. there are more grass around and only one or two rabbits! There are more rabbits than bobcats. Explain the concept of transfer of energy from one level to another. From producer to the consumer. Day 2: Discuss different levels of consumers (Primary, Secondary, Tertiary). Discuss food chain including animals and birds. Ask the students to come up with examples of primary, secondary and tertiary consumers. Let the students form a hierarchy. Day 3: Ask the students to correlate with the hierarchy which organism will have more energy and why. Introduce the concept of food pyramid. Introduce the concept saying why animals transfer only a partial energy. Ask them to think and then introduce the concept of animal metabolism and use of energy for their work, growth and survival. Day 4: Introduce Activity. Ask them to make a food pyramid showing the level of energy in land animals, birds and water animals. Thus making them think about the life in sea. Day 5: Provide the students with the assessment sheet and ask them to write what they understood. Assessment Food Chain Test

Name: ----- Class:

----- Read the directions carefully to each section of the test and answer completely. You will have 60 minutes to complete this assessment. The test is worth 32 points. Short Answer Answer the following questions using a complete sentence. 1. Define the term food chain. (2 point) 2. Define the term food web. (2 point) Fill In the Blanks 3. List the three main parts of the food chain. (3 point) 1. ----- 2. ----- 3. ----- 4. Look at the pictures below.

Write on the line next to each picture if it is a carnivore, herbivore, omnivore, or composer. (5 points) Horse _____

Lion _____ Pine Tree _____

_____ Human

_____ Bacteria

_____ Multiple-Choice CIRCLE the correct

answer. Each question is worth 1 point. 5. Which food chain shows the flow of energy in an ecosystem? a. Grass ? Cow ? Human b. Caterpillar ? Leaf ? Hawk c. Cow ? Grass ? Human d. Soil ? Bird ? Rabbit 6. Which of the following are only consumers? a. lizards, chipmunks, hawks b. acorns, eagles, squirrels c. grass, eagles, cow d. worm, squirrels, leaf 7. Which of the following is the last component of the food chain? a. consumer b. decomposer c. predator d. producer 8. Why are plants called producer organisms? Because.... a. most plants are last part of food chains. b. green plants eat other plants and insects. c. plants are able to make own food using sunlight d. plants can get energy from the soil and water. 9. Why are people and animals called consumer organisms? Because... a. they have energy by sun and water. b. their bodies do not make their own food. c. they cannot eat any other living things. d. people and animals are top part in food chain. 10. Who eats both plants and animals? a. carnivores b. herbivores c. omnivores d. composers 11. Which animals only eat plants? a. carnivores b. herbivores c. omnivores d. composers 12. Which animals only eat other animals? a. carnivores b. herbivores c. omnivores d. composers Essay 13. In complete sentences, describe the three parts of the food chain and explain two organisms for each part of the cycle. Use no more than two or three sentences to describe each part of the food chain. (Each part is worth 2 points)

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..... 14. Create an original food web using the diagram below. Include the role of the organisms at each level in the cycle. (6 points) Linkage Between les Summary Food is the most imperative part of our life. The lesson plan is devised to develop an understanding about the dependency of the animals on each other for procuring food. The lesson plan comprise of various categories of animals viz. herbivore, carnivore and the omnivore. The plan encompasses an understanding towards the process of degradation that is accomplished by the decomposers, the tiny living organisms which are invisible to the naked eye. It is also essential to develop a concept related to the flow of energy in the ecosystem. The chief source of energy is the Sun, it is essential for life on Earth. The concept must be introduced to the students and therefore it is well incorporated in the lesson plan. Moreover, food chain are linked and thus introduction of food web becomes important. Students must have the concept of the food pyramid and the amount of energy that is present at each level to have a concept- which level is actually having more solar energy and which organism gets less solar energy. This is well incorporated in the plan to provide the students with the concept of flow of energy by means of activity in various ecosystems. It is essential to highlight the importance of plants for the survival of living beings. The lesson plan is so devised that students must be able to discriminate between various levels of

organisms and between producers and consumers in different ecosystems, land, aerial and aquatic. All these are tried to cover up in the two week duration with hands on the activities to have a complete conceptual understanding. It is essential to develop concepts in science rather than simply remembering the definitions and so ample of activities were given to the students to meet the level of growing awareness and cut-throat-competition. Reference My Science Box. Available at <http://www.mysciencebox.org/foodchain/lesson>. [Accessed on 20th July 2011].