Name: _____

Science

Plant and Human Life

Plants are living organisms that can live on land or water. They have many different forms such as huge trees, others are herbs or some have bushy form. The basic food for all organisms is produced by green plants. Plants help in maintaining oxygen balance, the most important gas that enable us to breathe. Animals emit carbon dioxide by taking in oxygen. This rise in carbon dioxide levels in air is reduced by plants. Removal of carbon dioxide from the atmosphere reduces the greenhouse effect and global warming. It also maintains the ozone layer that helps protect Earth's life from damaging UV radiation. Humans directly or indirectly depend on plants for several of their needs.

Plants and Food

Plant products are essential for human nutrition. Plants produce fruits rich in carbohydrate, vitamins and fiber that are necessary for health maintenance. They become an integral part of our regular diet. Different parts of plants serve as several purposes in our diet. Plant products are source of vegetables, fruits, essential oils, spices, beverages and many more that provides the prime importance of plants to humans

Plants and industry

Plant products are also a source of industrial products. Wooden furniture, doors, windows and different household products are from wood of huge tress. Source of papers that we use daily for writing are from bamboos. Cotton are source of linen, Industry uses essential oils, cosmetics, perfumes, rubbers from plant sources

Plants and medicines

Plants are a great source of medicine even for life-threatening diseases. Also, plant medicine is safer due to their lower chances of side effects and also better compatibility to humans. Medicines derived from plants include vincristine, digitalis, colchicine, reserpine, quinine, morphine, taxol and aspirin

Plants and Bio-fuels

Some plants are also grown for the sake of bio-fuels. Plant products are used as coal and other fuel products. The plants fuel is less toxic as it does not emit harmful gasses and also less expensive. Even the plant waste is used to generate electricity

Plants and Natural pesticides

Plants are also the source of insecticides and pesticides. Artificial pesticides are harmful to the environment. They may even enter food causing health issue to human and animals. Using these naturally derived pesticides are safe. They degrade with time and even do not harm the soil. Ex: Pyrethrin (as Mosquito repellant), Neem, bacteria etc.)

Plants and habitat

Plants create habitats for many organisms. A single tree may provide food and shelter to many species of insects, worms, small mammals, birds, and reptiles.

Source: http://www.scienceindia.in/home/view_article/59

LIVEWORKSHEETS

Use your notes and background knowledge to answer the question.

aloe	cotton	corn

1. Name the plant that provides the materials to:

   a. feed humans and livestock = _____

   b. make clothing = _____

   c. make medicine = _____

2. Name **two** products ***other than clothing*** that can be made from a tree.

   a. _____

   b. _____

3. What is the name given to scientist who study plants? _____

4. Which **three** **(3)** nutrients derived from plants that are necessary for health maintenance: **carbohydrate** **vitamins** **fat** **fiber**

5. How do humans help plants? _____

LIVEWORKSHEETS

6. Write **true** or **false** for each statement.

a. _____ Plants can live on land or water

b. _____ Plants make oxygen during photosynthesis

c. _____ Humans do not use plants products for shelter

d. _____ Humans breathe out oxygen

e. _____ Artificial pesticides are not harmful to the environment

f. _____ Removal of carbon dioxide from the atmosphere helps reduce the greenhouse effect and global warming

g. _____ Plants create habitats for many organisms

h. _____ The fuel from plants are very toxic and expensive.

i. _____ Humans do not need plants

j. _____ This rise in carbon dioxide levels in air is reduced by plants.

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LIVEWORKSHEETS