

ACTIVITY 2

Purpose: To demonstrate the importance of air and the effects of air pollution, its causes and sources.

What are the basic needs of all living things?

Man, like all living things (plants and animals), can live only if certain basic needs are met. The four basic environmental needs of all living things are: sun, soil, water, and air.

How does the body get the oxygen it needs?

The body's need for oxygen is satisfied by the lungs bringing in air.

What happens to the lungs when they bring in dirty air?

The lungs show the effect of the air they bring in. If one lung received only pure air and the other the polluted air which surrounds us more and more, the pair of lungs would look quite different. The normal, healthy, pinkish-red lung tissue breathing pure air would probably be retained. But, with air pollution, the other lung would be darkened by particles carried in from the atmosphere.

What does it mean when the lung is dark?

A black lung is not, by itself, proof of illness. A black lung proves only the presence in the tissue of particles inhaled from polluted air. The impure air that deposits this dirt in the lung tissue does have an injurious effect on health.

Where might we find the kind of air that can keep our lungs pink and healthy?

The country can provide untainted air that can keep the lungs clean, healthy, and pink.

Why does a rural area have air different from a city's?

The country can provide cleaner air because there are few people living and working close together. Polluted air which would produce the darkened lung is found wherever there are large numbers of people living and working together amid the factories and businesses necessary to fill people's needs and desires.

What are the major sources of pollution in a city?

There are five major sources of today's pollution. They are:

Industry—and, of the many industries, the major polluters are pulp and paper mills, iron and steel mills, petroleum refineries, and chemical manufacturers.

Space heating – that is, the heating of buildings.

Incineration - burning of industrial waste, trash, and garbage.

Transportation—automobiles, motorcycles, trucks, buses, coal and diesel trains, ships, and planes.

Power plants—which supply electrical energy for lights, air conditioning, appliances, machinery, and trains and subways run by electricity.

What have been the results of more people and more products?

As population and the things people use and can produce increase, pollution gets worse. We have not only polluted our air, we have polluted our water and our soil, often by the same pollutants and sources. We have destroyed the homes of birds and animals, and often, the creatures themselves.