



Pre-Visit Vocabulary (9-12)

Sustainability Stations

Asbestos – a mineral that forms long, thin fibers which cause cancer or serious injury when inhaled. Asbestos was used in many building materials until it was banned by the EPA in 1989.

Biodegradable – a substance that is able to be broken down by bacteria, fungi or other simple organisms to a material which is chemically different; capable of decomposing naturally over a relatively short period of time.

Carbon Dioxide (CO₂) – a chemical compound released into the atmosphere through natural processes and human activities. Natural sources of CO₂ include volcanic eruptions and the respiration of humans and animals. Human activities that burn fossil fuel add CO₂ to the atmosphere, such as generating power, driving a car, or manufacturing products.

Compact Florescent (CFL) Light Bulbs – a light bulb illuminated by a current driven through a tube containing gas (argon and a small amount of mercury vapor). This current generates an invisible ultraviolet light that activates a florescent coating on the inside of the tube, which is then emitted as visible light.

Dioxin – this refers to a group of chemicals recognized as one of the “dirty dozen” of dangerous chemical pollutants. Short-term exposure to dioxins can cause skin irritation and damage to the liver; long-term exposure has been linked to a damaged immune system and developmental problems.

Halogen Light Bulb – a light bulb illuminated by a heated wire surrounded by a quartz envelope. Between the quartz and the wire is halogen gas; this gas reacts with the metal in the wire, recycling atoms as they evaporate, so that the bulb does not burn out as quickly compared to an incandescent bulb.

Incandescent Light Bulbs – a light bulb illuminated by a wire thread that is heated until it starts to glow. Over time, the wire evaporates at high heat, and the light bulb burns out.

Landfill – a little more than half of the trash that people throw away in America ends up buried in a landfill. A landfill is a carefully designed structure that is built to receive trash and minimize its impact on the environment through the use of a bottom liner and a daily cover of soil. Being isolated from air, water and light, trash in the landfill breaks down incredibly slowly. Old landfills have been uncovered to reveal newspapers that have not decomposed in over 40 years.

Light-Emitting Diode (LED) Light bulbs – tiny plastic light bulbs illuminated by the movement of electrons in a semiconductor (a material that is good at conducting electricity). Electrons moving between energy levels emit photons, or particles of light, which are directed up and out through the curved end of a plastic bulb.

Nitrosamines – a group of chemical compounds that have been linked with cancer. Nitrosamines form in personal care products when certain proteins and preservatives are combined. Nitrosamines are not listed as ingredients in a product because they are an impurity caused by the reaction of other ingredients.

Petroleum – crude oil; Petroleum is removed from an underground reservoir with an oil well and used in the production of gasoline and fuel oil (like the oil used in automobiles). Petroleum is the source for plastics and many chemical products.

Phosphates – a type of pollution that enters water ways from cleaning supplies, fertilizer, or human and animal waste. Too much phosphate added to water will cause algae and weedy plants to grow quickly, using up oxygen in the water that fish and other aquatic organisms need to survive.

Phthalates – a group of chemicals found in a wide variety of consumer products. Most phthalates are added to plastic to make it softer and more flexible; phthalates are also found in fragrances. People are exposed to phthalates when they use products that directly contain them, or when using products stored in plastic containers. The EPA has identified some phthalates that likely cause cancer; birth defects have been observed in animal studies on the effects of phthalates.

Toxicant – a substance that causes injury, illness, or death to a living thing; a poison.