

Pre-Activity Quiz Answer Key

1. Define “organic waste” and give two examples.
Organic waste is waste that can be broken down by microorganisms and other living things into carbon dioxide, water, methane or simple organic molecules.
Examples: food, grass, leaves, fruit
2. Have you ever heard of the word “compost”? Check yes or no: Yes No
If yes, what is it and what is it used for?
Compost is a mixture of various decaying organic substances (such as dead leaves and manure) that is used to fertilize soil; compost is used as a substrate for plant growth and a source of plant nutrients and organic matter.
3. What do we call animals and plants that harm or hinder crops?
Pests
4. What do farmers use to fight against unwanted pests?
Pesticides; herbicides and insecticides are also valid responses.
5. Do you know what a toxic chemical is? Check yes or no: Yes No
If yes, please explain.
A toxic chemical is any substance that may be harmful to the environment or hazardous to people’s health if inhaled, ingested or absorbed through the skin.
6. If you cover soil with transparent plastic, the temperature of the soil will increase. Please explain why.
The plastic sheet permits the sun’s radiant energy to reach the soil and then traps the heat in the soil, essentially creating the greenhouse effect.
7. Farmers need to remove weeds in two different plots before they plant tomatoes. On one plot with 80 weeds, they apply a pesticide. They cover the other plot that has 90 weeds with a transparent plastic tarp for a week. After 10 days they count 8 weeds in each plot. Which technique was the best way to eliminate the weeds? Why?
Plot A (pesticide technique) removed $(80-8)/80*100=90\%$ of weeds
Plot B (soil solarization technique) removed $(90-8)/90*100=91\%$
Treating the soil with a transparent plastic tarp was better because it removed a higher percentage of weeds. In addition, by using this technique the farmers reduced potential negative effects on the environment and themselves from the use of pesticides.