



Backyard Burning

Activity M.z

GRADE LEVEL: 6-8

OBJECTIVE: To understand the dangers of backyard burning and the toxins it releases.

MATERIALS: Class set of “Backyard Burning: The Facts”

VOCABULARY: open burning, particulates, waste incineration, heavy metals

PROCEDURE:

- Lead a discussion with the students.
 - Have you ever had an open fire in your backyard?
 - What materials did you burn in that fire? Lawn clippings? Cardboard? Trash?
 - What do you think happens to these materials when they are burned?
- Define **open burning**- another term for backyard burning, releases pollutants into the air at ground level instead of through a smoke stack such as during waste incineration.
- Define **waste incineration**- the burning of materials at a controlled high temperature in a properly built facility.
- Explain that when people burn lawn clippings or trash they release particulates into the air.
- Define **particulates**- very fine particles of smoke, dust, and fumes which can stay in the air for days and enter deep inside the lungs.
- Explain that ash from open burning can contain heavy metals such as chromium, lead, and cadmium.
- Ask: Is it healthy to breath chromium, lead, and cadmium?
- Explain these materials can be transported by rain water and contaminate water systems. This leads to the ash going into a garden, and eventually absorbed into vegetables!
- Ask: Did you know that backyard burning can be against the law?
- Explain Tennessee regulates open burning. All counties except for Shelby, Davidson, Hamilton, and Knox can burn vegetation (grown on their own property), paper, and cardboard without a permit on their residence if there is no waste collection service. (However, the fire can't bother the neighbors!)
- Explain burning tires, plastics, paint, and trash is illegal.
- Warn the students that they should not burn anything in their backyard, not only because of the environmental hazards, but because fire can be dangerous if it is not controlled properly!
- Ask: What are alternatives to backyard burning?
 - Avoid products with extra packaging so there is less garbage to dispose of.
 - Recycle as much as possible.

- Compost leaves, trimmings, and yard waste.
- Take materials to a landfill or convenience station.
- Hand out “Backyard Burning: The Facts.”

CLOSURE:

- Ask the students questions about what they have just learned such as:
 - What is another term for backyard burning? (open burning)
 - What is released into the air when you burn in your backyard?
(particulates, pollutants, ash which could contain heavy metals)
 - Does anyone have any questions about what we have learned today?
 - What are alternatives to backyard burning?