

Natural Gas Safety Decal

Objective

Students will design and construct decals which emphasize natural gas safety practices.

Curriculum Focus

Science
Art

Materials

- White contact paper
- Colored marking pens
- Student copies of "Natural Gas Safety Practices"
- Scissors

Key Vocabulary

Natural gas
Pilot light

Next Generation Science Correlations

4-LS1 - 2
4-LS1.D
MS-LS1 - 8
MS-LS1.D



Introduction

Natural gas is a very safe energy source, however, as with any energy source it is important that the user know how to safely use natural gas and care for natural gas appliances. There are important safety precautions to take when using natural gas inside and outside your home.



Procedure

1. Ask students the following questions to assess their knowledge of the subject and to stimulate interest in the activity:
 - What is a decal?
 - How can it be used to promote natural gas safety?
2. Discuss with the students the value of natural gas and the need to use it safely.
3. Display the *Natural Gas Safety Poster* and discuss it with the students. Pass out "Natural Gas Safety Practices." Discuss the practices and how they apply to students.
4. Ask the students to design decals, which illustrate natural gas safety practices on contact paper.
5. Have the students cut out the decal with the backing still on the contact paper.
6. The decal can be used at home, in school or in the community.



**Know what's below.
Call before you dig.**



Discussion

1. Ask the students to show their decals to the class and explain the safety practice depicted.
2. Have students list four natural gas safety practices.
3. Assign students to report on where they placed their decal and any effects it had.



To Know and Do More

Invite a representative from an advertising company to come to class and explain how they promote ideas and products.

Student Sheet: Natural Gas Safety Practices

1. Follow manufacturer's instruction for the installation, operation and maintenance of gas equipment and appliances.
2. Keep flammable materials (paint, solvents, cloth, paper) away from appliances.
3. Provide proper ventilation in areas around furnace, water heaters, dryers, ranges, etc.
4. Teach children how to use appliances safely and to recognize the odorant that is added to natural gas.
5. Keep fire extinguishers in the vicinity of appliances with open flames.
6. When lighting a natural gas appliance, always strike the match first, then turn on the natural gas.
7. If the pilot light will not light, turn the gas off, ventilate the area, and notify the natural gas company.
8. Have routine maintenance performed on appliances to keep them clean and in proper working order.
9. Make sure all vents and chimneys are free from blockage.
10. Clean or change filters on furnaces and dryers regularly.
11. Check the temperature setting on the water heater. It should be set at 120 F (49 C).
12. Keep curtains, clothing, paper, etc., away from any open flame. Keep range surface clean and free from dirt and grease.
13. A natural gas flame should be blue. If it is not, contact the natural gas company.
14. Call "811" before doing extensive digging in the yard.
15. If you smell the natural gas odorant in the house:
 - a. Tell an adult and leave the area at once.
 - b. Leave the doors open. Do not use the phone, light switches or flashlights.
 - c. Call the natural gas company from a neighbor's house.
 - d. Stay away until the natural gas company says it is safe to return.
16. Install a carbon monoxide (CO) detector in your home.
17. Use ranges and ovens for cooking, not heating the kitchen.
18. Play away from any natural gas equipment, including pipes and the meter.
19. Never use portable grills that are intended for outdoor use, in the house or garage.