

## Natural Gas is our Invisible Friend!

Natural gas is one of the most abundant energy sources in North America. In fact, during the cold weather months, more than half of the homes in the United States are kept warm and comfortable by natural gas. Southwest Gas is a local natural gas company that has been providing service to families for 80 years.

### Natural Gas – What is it and where did it come from?

Natural gas is an odorless, colorless, tasteless, clean-burning fossil fuel. It is called a fossil fuel because it comes from the fossils or remains of pre-historic plants and animals. Millions of years ago, much, if not most, of the Earth was covered by ancient seas that were filled with all forms of plant and animal life. As these forms lived and died, they settled on the floor of the world's seas, oceans, and lakes. When dinosaurs became extinct, their remains were also buried under mud and sands. Eventually, the planet's tremendous heat and pressure converted this matter into today's fossil fuels – coal, oil, and natural gas. Therefore, the natural gas we use today comes from fossils that are millions of years old. In North America, where we live, all three countries – the United States, Canada, and Mexico, have large underground natural gas deposits.



Natural gas is considered a clean fuel because when it burns, it only produces carbon dioxide, which is what we exhale when we breathe, and water vapor. It is also a good energy source in your home because, when it burns, natural gas gives off light and heat without emitting any smoke. For safety reasons, a special odorant that smells like rotten eggs is added to natural gas to get your attention if there is ever a leak.

### Do you know where you use natural gas in your home?

Natural gas keeps your home heated during the cold months. But, what about some other areas where natural gas helps keep your home running smoothly? See what having one or more of the following natural gas appliances provide:

- Water heater – Economically produces warm water for washing your hands, washing dishes, laundering your clothes or showering.
- Stove, oven or range – The “chefs” in your home, or aspiring chefs like you, use natural gas for baking, boiling, broiling, simmering, frying, sautéing and just about anything else needed to prepare breakfasts, lunches, dinners or special treats.
- Dryer – Natural gas drying is quick and easy. Since natural gas dryers dry clothes faster than other types of dryers, your clothes last longer – maybe even longer than it will take you to outgrow them.

Home heating, water heating, cooking, and clothes drying are the four main uses for natural gas in your home but there are other uses as well. For example, your home may have a natural gas fireplace, barbeque, pool heater, or outdoor fire pit.

Check with a grown-up in your home to find out what gas appliances you have.

### You can be your family's home "inspector"

Saving energy is important! It saves your family money and helps reduce our impact on Mother Earth. You can help your family save energy in your home by forming good habits and looking out for signs that your appliances are in good working order. Look around your home with a grown-up and see what you can do to be **Smarter Greener Better**.



- Check the setting on your thermostat. Grown-ups should set it between 65°F to 68°F in the winter and 78°F to 80°F in the summer, health permitting.
- Remind the adults in your home to change or clean furnace filters every two to three months. Equipment uses less energy and works more efficiently when it can "breathe" properly.
- Remind a grown-up that one of the least expensive ways you can weatherize your home is to install foam insulating gaskets inside wall outlets and switch plates. Without insulation, it can cost more to heat and cool your home. Gaskets are available at most hardware and home improvement stores and are really easy to install . . . maybe you can help.
- The burner flames on your range should always burn blue. If they are another color, like orange or yellow, be sure to let a grown-up know so they can call Southwest Gas.
- When your chores involve the laundry, be sure to dry full loads and check – or remind a grown-up to check – the lint filter in your dryer and to keep it clean between loads.
- Save water, electricity, and money by washing only full loads of dishes and then let them dry naturally when the cycle is over. It's a **Smarter Greener Better** choice.

### Safety Rocks!

Though, natural gas improves lives in many ways, there are rare instances when pipeline leaks can occur that can create a fire hazard. It is important for you to know the signs of a natural gas leak occur and what you should do to keep yourself and your family safe.



**Be alert...let an adult know if you:**



**Hear** – an unusual noise coming from the ground or an above-ground pipeline. A hissing sound may indicate escaping natural gas.



**Smell** – a non-toxic odorant is added to natural gas so that leaks can be detected. You'll know it by its rotten egg smell.



**See** – dirt or water blowing into the air, discolored vegetation surrounding a pipeline, or notice continuous bubbles in a standing pool of water.

### **If you think there is a natural gas leak:**



Leave the area immediately and, from a safe location, ask an adult to **call 911** and Southwest Gas at **1-800-528-4277**.



Warn others to leave the premises, and do not allow others to enter.



Do not use an automatic garage door opener, light matches, or lighters, or turn any switches on or off, as they may cause a spark.



Stay in a safe area until police, fire department, or Southwest Gas officials say it is safe to return.

Natural gas is our invisible friend. As an environmentally-friendly energy source, it warms and improves our lives in ways large and small.

### **Activities**

1. As a class, discuss how families can save energy by making small changes. Talk about what you can do to save energy in your home.
2. In the newspaper, find two stories about the environment. Identify the stories as “good news” or “bad news.” Write two statements about each story, explaining why this news is important and how the information might inspire average people to change their energy habits.
3. Write a letter to the editor which clearly outlines a strong personal opinion. Cite three concerns you have about the environment and include suggestions that you believe will convince others to act.
4. As a class, or in small groups, create safety charts that identify and illustrate natural gas safety rules.
5. Oil, coal and natural gas are all “fossil fuels” formed over millions of years from fossilized plant materials. Fossil fuels are often in the news. In the newspaper or online, find an article about fossil fuels. Write a one-paragraph summary of the major points and share with the class.
6. Home heating, water heating, cooking, and clothes drying are the four main uses for natural gas in homes. Your home may have a fireplace, barbeque, pool heater or outdoor fire pit as well. Does your home use natural gas? In the newspaper or online, find articles about people who have suddenly been without utilities for days or months, and how it has affected their lives.