HIGH SCHOOL STUDENTS

Compare the Emissions

Classroom Experiment (10 minutes)

ENERGY FOR EVERYONE propane

IMPORTANT This demonstration should only be conducted under the supervision of a propane professional.

BACKGROUND

Propane is a cleaner source of energy than conventional fuels like gasoline or diesel. It produces fewer of the emissions that contribute to global warming.

WHY IT MATTERS

Many homeowners, businesses, and school districts are trying to minimize their environmental impact by using cleaner energy, like propane. By making the decision to use propane, they're getting closer to their environmental goals.

SAFETY REQUIREMENTS

Before performing this demonstration, we'll make sure we have the following items:

- Fire extinguisher.
- Safety glasses.

SUPPLIES

- Two paper plates (wax free).
- Roll of aluminum foil.
- Non-soy taper candle.
- Propane torch (14 oz).

The chemical formula for propane is C_3H_8 — it's made up of three carbon atoms, and eight hydrogen atoms.

HIGH SCHOOL STUDENTS

Compare the Emissions

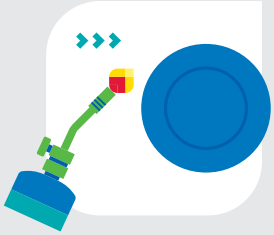
Classroom Experiment (10 minutes)

ENERGY FOR EVERYONE propane

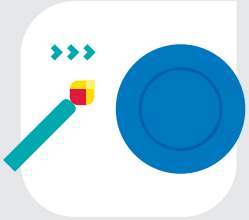
PROCEDURE

This experiment is one way to visualize the smaller impact that propane has on the environment compared with other fuel types. It's a difference you can see for yourself.

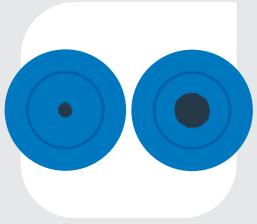
1. First, we'll wrap the paper plates in aluminum foil.



2. Next, the propane professional will turn on the propane torch and hold it 2–3 inches away from the foil of one plate for about 15 seconds. This represents the impact propane has on the environment. We'll turn the torch off and set the plate aside.



3. Now, he/she will light the candle and hold it 2–3 inches away from the foil of the other plate for about 15 seconds. This represents the impact any other carbon-based fuel has on the planet. We'll blow out the candle and set the plate aside.



4. From here, we can compare the two plates. The plate that got close to the propane torch has a smaller mark than the plate that was near the candle.

GROUP DISCUSSION

How does this relate to other topics you've learned in science and chemistry classes?

Learn more about propane, the energy for everyone, at **Propane.com**.