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**Unit 2 – Investigation 1**

**Activity 1.1 -** *Can my finger start a fire?*

**BEFORE YOU BEGIN:** See me to confirm that you have SUCCESSFULLY joined the correct class, then get my initial below.

**Teacher initial:** \_\_\_\_\_\_\_\_\_\_\_\_

**Intro to Unit 2:** In the previous unit, you developed a model of the structure and behavior of materials that incorporates atoms and electric interactions. In this unit, you will expand your model of materials by adding energy to your models.

1. Can electric charge start a fire? Explain your thinking.

**VIDEO LINK *(link on Weebly)*** *-* <https://drive.google.com/file/d/0BxiNUSTQND4bUzNHdXlJSVNZVEk/view>

In previous investigations, you developed a model of charge to explain your observations of interactions between objects. The Van de Graaff generator builds up a strong electric field, but this does not explain all of your observations. In the upcoming activities, you will develop a model of energy to explain observations that are not accounted for by your model of charge.

Energy is a common idea, but it is hard to define. Start by thinking about what you already know about energy.

2. Brainstorm about energy. What types of energy have you heard of?

3. What questions do you have about energy?

4. What types of energy do you think may have been involved when the Bunsen burner was lit with the spark from the Van de Graaff generator?

5. Draw an initial model to explain how the spark from the Van de Graaff generator lit the Bunsen burner.

Top of Form

Describe your model.Bottom of Form

6. What questions or thoughts do you have about why the spark could start the fire?