



Greetings,

We are starting a new science unit in class called *How Can We Provide Energy to Meet Diverse Needs?* The unit leads up to a design challenge. Your child will design, build, and test circuits to solve a problem by providing an assistive doorbell system. Your child's at-home and out-of-school experiences can play an essential role in supporting the development of their own and their classmates' understanding of how the world works. As I work on planning the lessons, I would appreciate some ideas about how your child may have already experienced our new topic. Your feedback will help me incorporate their experiences into the unit.

If you can, please respond to as many of the following questions as you are comfortable answering. Rest assured that your child does not have to have relevant previous experiences to be successful with the unit.

1. Does your child have any experience solving engineering problems outside of school? If so, please share some information about their engineering work.
2. Is your child familiar with building or testing simple electronic circuits? If so, please describe what they have done.
3. Has your child ever seen an electricity-generating facility, either near where they live or while on a trip? What type(s) of facilities? Examples include hydroelectric dams, solar panels, wind turbines, and coal-burning power plants.

In addition to sharing your child's experiences with me, I encourage you to discuss topics related to this science unit with your child. This can help them make sense of what they are doing in school. Here are some examples of questions to ask at home:

1. Are you designing a new type of flashlight? What problem are you trying to solve? What are the goals for your solution?
2. Are you doing research to figure out the best way to provide electricity to our state? What advantages and disadvantages of different energy resources have you discovered?
3. I hear you have been solving different problems that involve energy being transferred through a system. What different ways have you introduced energy into the systems to begin with?

You can learn more about this science unit at [ScienceEducation.si.edu/energy-phenomenon](https://ScienceEducation.si.edu/energy-phenomenon). Please feel free to ask me questions. I want to work with you to make sure your child gets the most out of this unit.

Thank you.