

## **STEM Volunteer Information**

Help us spark the interests of the next generation in STEM. Many teachers and schools lack the appropriate materials to teach STEM subjects in a way that applies to real-world careers.

- Volunteers who would be willing to (and are good at) going into the classroom to do the following:
  - Demonstrations (experiments and the like)
  - Teach a concept or two (and bring giveaways for kids to get their attention)
  - Explain their job and what they do daily, how they prepared educationally (what degree, what college, etc.) – something they'd say at a career day
- Videos (YouTube or otherwise) that we could use in classrooms to demonstrate anything involving energy/the industry
  - Examples of experiments (showing how to do them)
    - If they would be willing to produce more professional versions of any applicable videos we find, that would be helpful too (see below).
  - o Informational videos that show pictures, charts, etc. with a voice-over explanation

## Classroom resources

- Kits including things students could take home and use in their homes (example: energy efficient light bulbs, etc.) with an explanation of how it applies to energy
- Materials to perform classroom experiments (see below for examples of experiments that maybe you could show them)
- Anything that could be used as a visual aid in a demonstration (posters, handouts, power points, etc.)
- Any handouts/teaching materials that could be reproduced for classroom use (I will go through each thing and apply TEKS so teachers are much more likely to use them in the classroom)
  - coloring pages/books, dot-to-dots, etc. for elementary students
  - charts, graphs, worksheets, etc. for Middle School & High School students

- project/experiment ideas (or a problem requiring a solution) that students could perform independently for contests/extra credit
- trivia questions for a classroom game
- o Any apps, online tools, or games that students can use to track usage at home/school
- Student shadow/tour opportunities
- Anything to add to our newsletters
  - Energy tips
  - Coupons/Offers (for Houston Museum of Natural Science, electrical plans, anything etc.)
  - Energy fact (historical)
  - Important/impactful person in history of energy
  - o Video
  - o experiment