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| **I wonder…**Thought outline | *INSTRUCTIONS:* *Ask yourself “I wonder…?” Fill out this box with things you wonder about when it comes to energy and your home or community.**To learn more about energy, look at this video:* [*https://youtu.be/ZsL-OdpfgKk*](https://youtu.be/ZsL-OdpfgKk)EXAMPLE:* I wonder how we use energy at home.
* I wonder where the energy comes from.
* I wonder what uses the most energy in our home.
* I wonder if I can generate energy from home with solar or wind.
* I wonder where the best place around my home for a solar unit or wind turbine.
* I wonder why my house is cold in the winter.
* I wonder why the back room is colder than the other rooms in my house.
 |

**My favorite “I wonder” statement is:**

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| *INSTRUCTIONS:**Choose your favorite “I wonder” statement.*EXAMPLE: I wonder why my house is cold in the winter. |

**Generate questions and answers about my “I wonder”/problem statement:**

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| *INSTRUCTIONS:* *Let us find out a little bit more about your “I wonder” statement. You can use the five W’s and how to help you think more about fixing your problem. WHO, WHAT, WHEN, WHERE, WHY, and HOW.* |
| EXAMPLE:QUESTIONS* What makes my house cold?
* When is my house the coldest?
* When is it the warmest?
* Where is my house the coldest?
* Where is it the warmest?
* How do I find out why my house is cold?
* How can I make it better?
 | ANSWERS* Lack of insulation & I can feel a little bit of cold air come in on the side of the windows
* At night
* Around 2p when the sun is shining through the window
 |

**Change “I wonder” statement into a problem statement:**

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| *INSTRUCTIONS:* *A problem statement includes what is the problem is and why it’s a problem.*EXAMPLE:My house is cold in the winter because the windows aren’t properly sealed. |

**Generate multiple solutions to your problem:**

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| *INSTRUCTIONS:* *Brainstorm some solutions to your problem.*EXAMPLE:* Seal windows
* Add plastic window covers
* Add thermal curtains
* Change out windows with more panes
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**Decide on a solution:**

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| *INSTRUCTIONS:* *Decide which is the best solution to address your problem.*EXAMPLE:I will take a three pronged approach and seal windows, add plastic window covers, and thermal curtains to the windows. |

**My Energy Challenge Topic:**

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| *What is the overall theme or idea of your Energy Challenge project.*EXAMPLE:Insulating windows |

**Optional. Do background investigating on your Energy Challenge topic:**

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| *You can use https://www.scribbr.com/category/apa-style/ to help cite the places you went to find out information:*EXAMPLE:*Grade 4 Where Does Energy Come From?* (2020, May 1). [Video]. YouTube. <https://youtu.be/ZsL-OdpfgKk>Lipford, D. (n.d.). *5 Reasons Why Your House Is So Cold*. Today’s Homeowner. Retrieved January 4, 2021, from https://todayshomeowner.com/5-reasons-why-your-house-is-so-cold/U.S. Department of Energy. (n.d.). *Insulation*. Energy.Gov. Retrieved January 4, 2021, from https://www.energy.gov/energysaver/weatherize/insulation |

**Optional. I learned that:**

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| *Share what you learned about your “I wonder” statement after doing some quick research. You can add more when you have more time.*EXAMPLE:I learned that my house has insulation between the outside and inside walls. Insulation is like a blanket for my house, it keeps the warm air in the house during the winter and cold air in the house during the summer. I learned that there are lots of types of insulation and each has different costs.  |