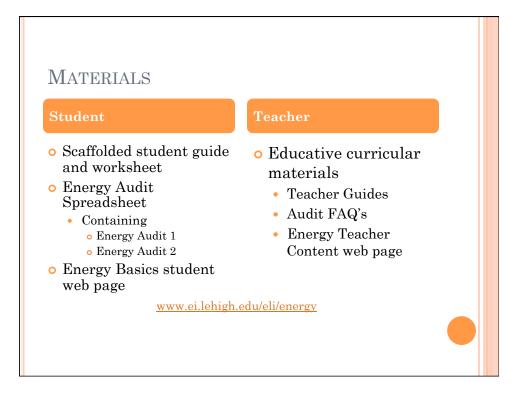
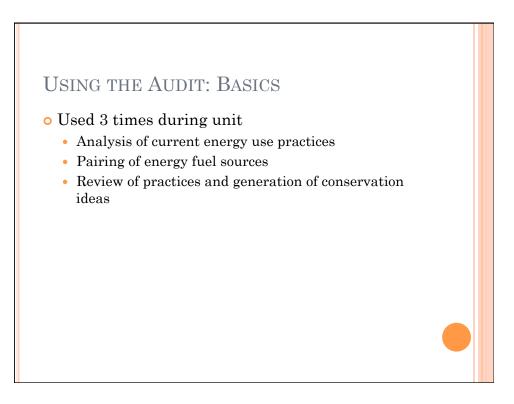


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# EXPLORING THE AUDIT

- Organization
- Sources of Energy Values
- Units
  - Conversions
    - Electricity based values Typical wattage of appliances
    - ${\scriptstyle o}$  Fuel based values BTU values and personal mileage

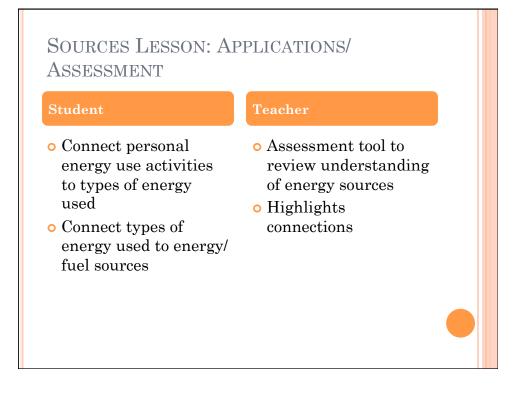
## EDUCATIVE CURRICULAR MATERIALS

- Improve GS-TPACK across all facets
  - Geospatial Technological Pedagogical And Content Knowledge
- Provide scaffolding for teacher learning and student investigation
- Model thought patterns for teachers as well as students

# ENERGY AUDIT-FIRST VISIT: APPLICATIONS/ASSESSMENT

### Teacher

- Awareness of personal/family energy else
- Introduce energy units and conversions
- Introduce concept of conservation
- Set benchmark level for student understanding
- Identify student misconceptions about personal energy.
- Identify needs for spreadsheet skills
- Highlight areas to focus on in later lessons



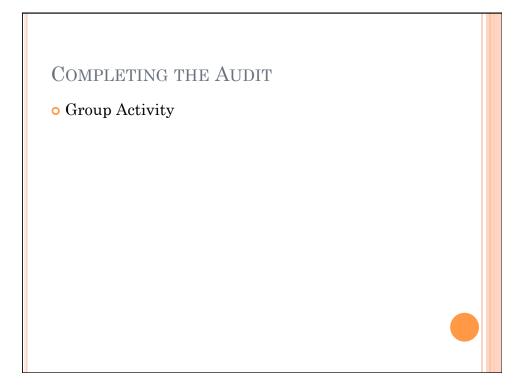
# REVISITING THE AUDIT: APPLICATIONS/ ASSESSMENT

#### Student

#### Teacher

- Recalculate personal energy uses based on current practices
- Self-evaluation: comparing new audit results to old audit results
- Attribute change or lack of change to personal behaviors
- Attribute reasons for behavioral change
- Identify new conservation practices

- Evaluate student awareness and knowledge
- Emphasize reasons for changes in energy use based on personal behavior
- Identify areas of misunderstanding to address prior to final project
- Encourage reflection



# STRATEGIES/ DIFFERENTIATION

- Differentiated instructional materials (teacher vs. student level) can be modified based on students' needs
- Instructional support range
  - Guided assistance
  - Semi-independent
  - Independent work
- Use as formative or summative assessment tool to guide direction