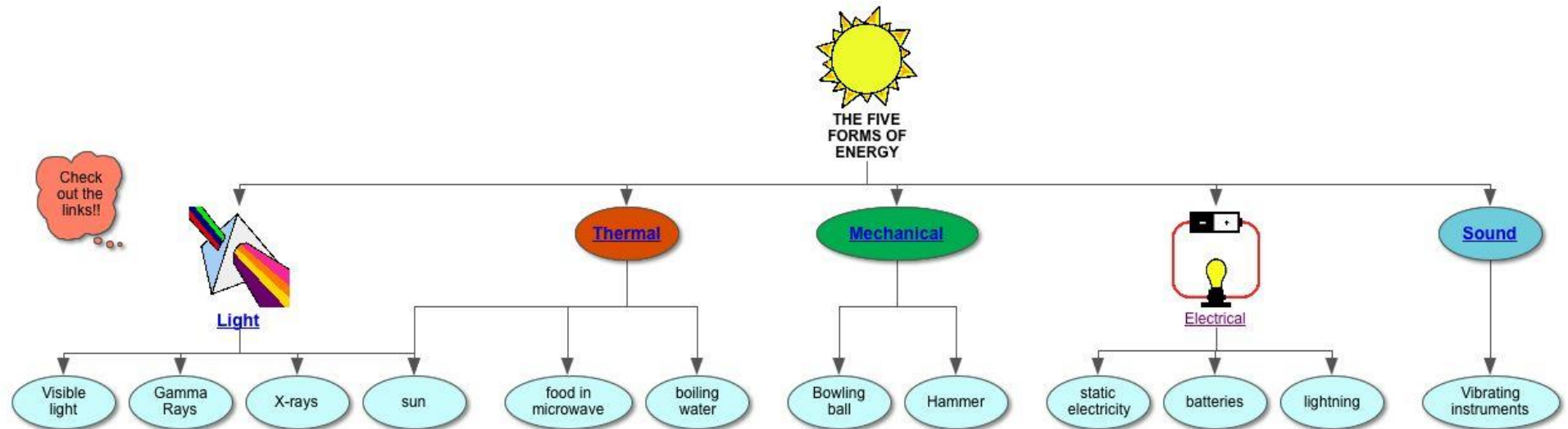


Lesson Plan Model¹

Lesson Title/#: Types of Energy



Grade Level: 4th

Learning Central Focus

<p>Central Focus</p> <p>What is the central focus for the content in the learning segment?</p>	<p>The central focus will be on the main types of energy and what they do. (Light, Thermal, Mechanical, Sound, and Electrical).</p>
<p>Content Standard</p> <p>What standard(s) are most relevant to the learning goals?</p>	<p>4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.</p> <p>4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.</p> <p>4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide</p>

¹ The lesson plan template is intended to be used as a **formative** process prior to a candidate's submission of edTPA materials. The template offers an opportunity for candidates to practice documenting their thinking when planning lessons leading up to the learning segment they will teach for edTPA. Lesson plans with this level of detail are not necessary and should not be submitted as part of edTPA. It is intended to prepare candidates to articulate their thinking and justification for plans when responding to the Planning Task commentary prompts

	4-PS3-4. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.
<p>Student Learning Goal(s)/ Objective(s)</p> <p>Skills/procedures What are the specific learning goal(s) for student in this lesson?</p> <p>Concepts and reasoning/problem solving/thinking/strategies² What are the specific learning goal(s) for students in this lesson?</p>	<p>Students will be able to identify different forms of energy, as well as give examples of each form. Students will work in small groups to explore the 5 different forms of energy. Students will understand what the five forms of energy do.</p> <p>Students will use exploration and reasoning to understand these five forms of energy and how they are applied to our every day lives.</p>
<p>Prior Academic Knowledge and Conceptions</p> <p>What knowledge, skills, and concepts must students already know to be successful with this lesson?</p> <p>What prior knowledge and/or gaps in knowledge do these students have that are necessary to support the learning of the skills and concepts for this lesson?</p>	Students must know the concept of energy and what it is before learning about the different forms of energy.
<p>Common Errors, Developmental Approximations, Misconceptions, Partial Understandings, or Misunderstandings</p> <p>What are common errors or misunderstandings of students related to the central focus of this lesson?</p>	

² The prompt provided here should be modified to reflect subject specific aspects of learning. Language here is mathematics related. See candidate edTPA handbooks for the "Making Good Choices" resource for subject specific components.

How will you address them for this group of students?	
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Instructional Strategies and Learning Tasks

Description of what the teacher (you) will be doing and/or what the students will be doing.

<p>Launch _____ Minutes</p> <p>How will you start the lesson to engage and motivate students in learning?</p>	<p>15 minutes</p> <p>Explain energy and how it is around us everywhere. The introduce the 5 forms and what they do/examples. Give examples/pictures and let the students tell me which form of energy it is. Answer any questions.</p>
<p>Instruction _____ Minutes</p> <p>What will you do to engage students in developing understanding of the lesson objective(s)?</p> <p>How will you link the new content (skills and concepts) to students' prior academic learning and their personal/cultural and community assets?</p> <p>What will you say and do? What questions will you ask?</p> <p>How will you engage students to help them understand the concepts?</p> <p>What will students do?</p>	<p>15 minutes</p> <p>Teacher and students will discuss the forms and how they can change to one another. The energy transformation in light, heat, sound, mechanical, and electrical. How the energy is conserved.</p>

<p>How will you determine if students are meeting the intended learning objectives?</p>	
<p>Structured Practice and Application _____ Minutes</p> <p>How will you give students the opportunity to practice so you can provide feedback?</p> <p>How will students apply what they have learned?</p> <p>How will you determine if students are meeting the intended learning objectives?</p>	<p>Split students up into groups and have five different stations with different forms of energy so that the students can explore and really learn hands on how the different forms work. 6 minutes at each station.</p>
<p>Closure _____ Minutes</p> <p>How will you end the lesson?</p>	<p>10 minutes</p> <p>We will talk about what the students did in the centers and what they learned.</p>
<p>Differentiation/Planned Support</p> <p>How will you provide students access to learning based on individual and group needs?</p>	<p><i>Whole Class:</i></p> <p><i>Groups of students with similar needs:</i></p>

<p>How will you support students with gaps in the prior knowledge that is necessary to be successful in this lesson?</p>	<p><i>Individual students:</i></p> <p><i>Students with IEP's or 504 plans:</i></p> <p><i>Strategies for responding to common errors and misunderstandings, developmental approximations, misconceptions, partial understandings, and/or misunderstandings:</i></p>
<p>Student Interactions</p> <p>How will you structure opportunities for students to work with partners or in groups? What criteria will you use when forming groups?</p>	<p>The small groups will be good to explore the different stations.</p>
<p>What Ifs</p> <p>What might not go as planned and how can you be ready to make adjustment?</p>	<p>Maybe the stations could get out of control, but I think it will be fine.</p>
<p>Theoretical Principles and/or Research-Based Best Practices</p>	

<p>Why are the learning tasks for this lesson appropriate for your students?</p>	
<p>Materials</p> <p>What materials does the teacher need for this lesson?</p> <p>What materials do the students need for this lesson?</p>	<p>Sound station: Drum sticks, xylophone, and two cups attached by string.</p> <p>Light station: flash lights</p> <p>Thermal station: salt and ice</p> <p>Mechanical station: bouncy balls</p> <p>Electrical station: battery and light circuit</p>

Academic Language Demand(s):

<p>What language function do you want students to develop in this lesson? What must students understand in order to be intellectually engaged in the lesson?</p>	
<p>What content specific terms (vocabulary) do students need to support learning of the learning objective for this lesson</p>	
<p>What specific way(s) will students need to use language (reading, writing, listening and/or speaking) to participate in learning tasks and demonstrate their learning for this lesson?</p>	
<p>What are your students' abilities with regard to the oral and written language associated with this lesson?</p>	
<p>How will you support students so they can understand and use the language associated with the language function and other</p>	

demands in meeting the learning objectives of the lesson?	
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Assessments:

*Describe the tools/procedures that will be used in **this lesson** to monitor students' learning of the lesson objective(s). Attach a copy of the assessment and the evaluation criteria/rubric in the resources section at the end of the lesson plan.*

Type of assessment (Informal or Formal)	Description of assessment	Modifications to the assessment so that all students could demonstrate their learning.	Evaluation Criteria - What evidence of student learning (related to the learning objectives and central focus) does the assessment provide?

Analyzing Teaching

To be completed after the lesson has be taught

What worked? What didn't? For whom?	
Adjustments What instructional changes do you need to make as you prepare for the lesson tomorrow?	
Proposed Changes.	<i>Whole class:</i>

<p>If you could teach this lesson again to this group of students what changes would you make to your instruction?</p>	<p><i>Groups of students:</i></p> <p><i>Individual students:</i></p>
<p>Justification</p> <p>Why will these changes improve student learning?</p> <p>What research/theory supports these changes?</p>	

Resources:

Attach each assessment and associated evaluation criteria/rubric.