**District Science Lesson Plan Template**

Teacher: **Robinson/Hall** Date: **FEBRUARY 3-7, 2025**  Subject: **Science**  Period:

|  |
| --- |
| **Alabama CCRS/COS: Standards**  4 .PS .3 Investigate to determine changes in energy resulting from increases or decreases in speed that occur when objects collide. |

|  |
| --- |
| **Outcome(s)/Objective(s)/I can statement.**   * Define Energy * **Determine the relationship between Energy and Forces** |

**ACTIVATING LEARNING STRATEGY/STRATEGIC TEACHING STRATEGIES:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | KWL |  | Word Splash |  | Anticipation Guide |  | Lecture |  | Graphic Organizer/VLT |  | Poem, Rhymes, etc. |
|  | Survey |  | Possible Sentence |  | Think-Pair-Share |  | Reading |  | Pictograph |  | Acronyms/Word |
|  | First Word |  | Concept Map |  | Vocabulary Overview |  | Model |  | Diagram |  | Other: \_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Word Map |  | Frayer Model |  | Daily Language Practice (DLP)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | Hands-on |  | Mind Map/Visual Guide |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Engagement Strategies:**  - Collaborative Group Work - Writing to Learn  - Literacy Groups Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  - Questioning Techniques - Scaffolding Text -Classroom Talk - T.W.I.R.L. | | | | | | | | | | | |
| **Technology Integration:**  Smart board Document Camera IPADS Mac Books Computers Kindles Interactive Tablets Digital/ Video Camera Clickers ACCESS Computer Program: www.readworks.org\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | | | | | | |

**This Week’s Vocabulary:**

investigation, energy, evidence, speed, motion, thermal (heat) energy, sound energy, collision, law of conservation of energy, energy transfer, chemical energy, mechanical (motion) energy, model

**PROCEDURAL CONTENT (application)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | |
| ***Essential Question*** | | **What is the law of conservation of energy?** | **What materials are needed to investigate changes in speed during collisions?** | **Which investigative tools are necessary to determine how energy is affected when the speeds of objects change after they collide?** | **How can colliding objects be modeled?** | **How can the relationship between speed and energy be described?** | |
| ***Daily Objective(s)***  ***I Can Statement*** | | **I define the law of conservation of energy?** | **I can determine the materials needed to investigate changes in speed during collisions.** | **I can determine the tools that are necessary to to how energy is affected when speeds of objects change after they collide.** | **I can determine how colliding objects be modeled.** | **I can describe the relationship between speed and energy.** | |
| ***Preview***  ***(Before)***  ***Warm-up- Hook*** | | Graphic Organizer | Turn and Talk | Say Something | Turn and Talk | Quick Write | |
| ***Instruction***  ***(During)***  **I Do-**  **We Do-**  **Y’all Do-**  **You Do-** | | 1.**Engage:** Read articles (1 and 2) as a class.2. **Explore:** Present students with the phenomenon image of a backpack.3. Discuss articles (1 and 2). 4. Answer Article Assessment Questions. | 1.**Engage:** Read articles (3 and 4) as a class.2. **Explore:** Present students with the phenomenon image of a backpack.3. Discuss articles (3 and 4). 4. Answer Article Assessment Questions. | 1.**Engage:** Read articles (4 and 5) as a class.2. **Explore:** Present students with the phenomenon image of a backpack.3. Discuss articles (4 and 5). 4. Answer Article Assessment Questions. | 1.**Engage:** Read articles (5 as a class.2.Explore: Create and Test 3. Discuss article (3) 4. Answer Article Assessment Questions. | 1.**Engage:** Read entire article as a class.2. Explore: Explain and Communicate 3. Discuss article. Answer Articles Assessment Questions. | |
| Small Groups | | Engage in Collaborative discussions.  Complete Article Assessment | Engage in Collaborative discussions.  Complete Article Assessment | Engage in Collaborative discussions.  Complete Article Assessment | Engage in Collaborative discussions.  Complete Article Assessment about article | Engage in Collaborative discussions.  Complete Article Assessment about article | |
| *After/Homework* | | Read the Science weekly article | Read the Science weekly article | Read the Science weekly article | Read the Science weekly article | Read the Science weekly article Week | |
|  | **Assessment (Formative):** Class work Notebook Homework Quizzes Tests Computer Activities Collaborative Work Project/ Other: | | | | | |  |

**Assessment (Summative):** QuizzesTestsGroup Activities Project Based Other: