**District Science Lesson Plan Template**

Teacher: **Robinson/Hall** Date: **December 9-13, 2024**  Subject: **Science**  Period:

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| **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. |

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| **Outcome(s)/Objective(s)/I can statement.*** Define Energy
* **Determine the relationship between Energy and Forces**
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**ACTIVATING LEARNING STRATEGY/STRATEGIC TEACHING STRATEGIES:**

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|   | 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)**

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| --- | --- | --- | --- | --- | --- |
|  | **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: