Teacher: ROBINSON/HALL Date: 11/11-15/2024 Subject: SCIENCE. Period:

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| **Alabama CCRS/COS: Standards RETEACH**  4-PS3-4: Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.  3-5-ETS1-1: Define a simple design problem reflecting on a need or want that includes specified criteria for success and constraints in materials, time, or cost.  3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.  3-5-ETS1-3: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. |

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| **Outcome(s)STUDENTS WILL BE ABLE TO**  Students will learn about the phenomenon of how a Bluetooth speaker works. They will explore the concept of a Rube Goldberg machine. Students will use these ideas to design a device that converts energy from one form to another by following the engineering design process |

**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 |  | |  |
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| **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:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | | | | | | | |

**This Week’s Vocabulary:**

**boost: extra energy added to make up for what will be lost as heat**

**PROCEDURAL CONTENT (application)**

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|  | | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | |
| ***Essential Question*** | | How does a Bluetooth speaker work? | How does a Bluetooth speaker work? | How does a Bluetooth speaker work? | How does a Bluetooth speaker work? | How does a Bluetooth speaker work? | |
| ***Daily Objective(s)***  ***I Can Statement*** | | **I can apply scientific ideas to design, test, and refine a device that converts energy from one form to another.** | **I can apply scientific ideas to design, test, and refine a device that converts energy from one form to another.** | **I can apply scientific ideas to design, test, and refine a device that converts energy from one form to another.** | **I can apply scientific ideas to design, test, and refine a device that converts energy from one form to another.** | **I can apply scientific ideas to design, test, and refine a device that converts energy from one form to another.** | |
| *Preview*  *(Before)*  *Warm-up- Hook* | | REAL WORLD INTRODUCTION  SAY SOMETHING  VIDEO  WHOLE GROUP LESSON EXPLICIT INSTRUCTION | KWL/VIDEO | SAY SOMETHING  RECAP LESSON | SAY SOMETHING  RECAP LESSON | REVIEW | |
| *Instruction*  *(During)*  I Do-  We Do-  Y’all Do-  You Do- | | Studies Weekly Week 12  VOCABULARY BUILDER  QUICK WRITE  INDEPENDENT PRACTICE | Studies Weekly Week 12  REVIEW LESSON  POPCORN READ  CHUNK READING  COLLABORATIVE GROUP WORK | Studies Weekly Week 12  SHARE AND TALK  JOURNAL WORK  INTERACTIVE /ACTIVITY Group Research- Types of energy | Studies Weekly Week 12  QUICK WRITE  ONE PAGER/ART TALK  INDEPENDENT PRACTICE  INTERACTIVE /ACTIVITY Group Research- Types of energy | Studies weekly assessment  Present projects | |
| Small Groups | | CENTERS/GROUPS | CENTERS/GROUPS | CENTERS/GROUPS | CENTERS/GROUPS | CENTERS/GROUPS | |
| *After/Homework* | | GRAND CONVERSATION  article review  STUDY NOTES | GRAND CONVERSATION  Article review  STUDY NOTES | GRAND CONVERSATION  Article review  STUDY NOTES | GRAND CONVERSATION  Article review  STUDY NOTES | GRAND CONVERSATION  Article review | |
| **Assessment (Formative):** Class work Notebook Homework quizzes Tests Computer activities Collaborative work  Project/ Other: | | | | | |

**Assessment (Summative):** Quizze**s** T**ests** Group activities Project based Other:

**Summarizing****:**  3-2-1  Ticket out the Door  The Important Thing  Cue Cards  Teacher Questions  Student Summary  Other:SNB CHECK