

Name: Kevin Woolridge		Grading Quarter: Q1	Week Beginning: W1
School Year: 2023		Subject: Conceptual Physics and Engineering	
Monday	Notes: Teachers only	<p>Objective: Students will demonstrate understanding of step one, “defining the problem” of the Science and Engineering Practices as defined by NGSS: as evidenced by reading an article and synthesizing it to a single problem statement.</p> <ul style="list-style-type: none"> • Students are asked to read 3 articles of current local or global issues. • Students will then research to find an issue that they are interested in and that they feel is appropriate for a problem-solving exercise. • What are you being asked to achieve? • What’s the goal? 	Academic Standards: Appendix 2: Science and Engineering Practices
Tuesday	Notes:	<p>Objective: Students will demonstrate understanding of Step 2: Identify criteria and constraints of the Science and Engineering Practices as defined by NGSS: as evidenced by Identify criteria and constraints from a issue of their choosing.</p> <ul style="list-style-type: none"> • Using the issue of their choosing from the prior lesson students will Identify criteria and constraints related to finding a solution to solving the problem. • What are the activity’s requirements? • What will limit the design (i.e., supplies, time, etc.)? 	Academic Standards: Appendix 2: Science and Engineering Practices
Wednesday	Notes:	<p>Objective: Students will demonstrate understanding of Step 3: “Brainstorm possible solutions” of the Science and Engineering Practices as defined by NGSS: as evidenced by Identify Brainstorm possible solutions to the issue of their choosing from the prior lesson.</p> <ul style="list-style-type: none"> • Using the issue of their choosing from the prior lesson students will Brainstorm a list of potential solving to the problem they have chosen. • In addition to brainstorming with a partner/group, this step requires you to do research on your possible designs including what has been done in the past. • It is helpful during brainstorming to describe and sketch possible approaches to solving the problem. 	Academic Standards: Appendix 2: Science and Engineering Practices
Thursday	Notes:	<p>Objective: Students will demonstrate understanding of Step 4: (Select a design), of the Science and Engineering Practices as defined by NGSS: as evidenced by Select a design a possible solution to the issue of their choosing from the prior lesson.</p> <ul style="list-style-type: none"> • Using the issue of their choosing from the prior lesson students will Select a potential design solution from the list they created during the prior step “Brainstorming” a list of potential solutions to the problem they have chosen. 	Academic Standards: Appendix 2: Science and Engineering Practices

Friday	Notes:	<p>Objective: Students will demonstrate understanding of Steps 5: (Build a prototype, Create a solution), of the Science and Engineering Practices as defined by NGSS: as evidenced by Select a design a possible solution to the issue of their choosing from the prior lesson.</p> <ul style="list-style-type: none"> • Using the issue of their choosing students will Build a prototype and/or, create the solution they identified during the prior step “step 5” Build a prototype, create a solution. • Once completed, students will test, and evaluate it, then refine the design. 	<p>Academic Standards:</p> <p>Appendix 2:</p> <p>Science and Engineering Practices</p>
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