

Lesson Topic:	#8_Iterative Design Process
Inquiry:	What is the Iterative Design Process?
CCSS:	4-6.CT.10
Objective:	<p>Students will explore the Iterative Design process in this class. On the first day, they will work to solve a problem in their table group – construct a boat out of aluminum foil that should float and hold the weight of nickels. Students will use tests and revise their boats twice.</p> <p>Then, students will be introduced to the IDP, examine the process used to build and test the boat and explore how it relates to the IDP.</p>
Resources:	<ul style="list-style-type: none"> <li>- 6 containers filled with water</li> <li>- 24 pre-cut sheets of Aluminum Foil</li> <li>- 6 rolls of pennies (50)</li> <li>- 8_Worksheet</li> </ul>
<b>Agenda</b>	
Starter:	→ How do we solve problems? What are the steps to solving a problem you've encountered?
Guided Practice:	<p>→ Review starter as a class.</p> <p><b>Aluminum Boats Activity</b></p> <p>→ Introduce the activity.</p> <p>→ Instruct students to follow directions on the 8_Worksheet.</p>
Work Period:	<p>→ Set a timer, and have students work for 10 minutes to plan, build and test how many pennies their boats can hold without sinking.</p> <p>→ When the timer goes off, instruct students to review the plan for their boats and elements to improve.</p> <p>→ Reset the timer, and have students build a new boat or improve their first one based on its performance.</p>

	<b>Iterative Desing Process</b> → Go over the IDP with the students <ul style="list-style-type: none"> <li>◆ Elaborate on what each step does and how it works.</li> <li>◆ Use the activity to illustrate how to implement the IDP.</li> </ul>
Closing:	→ Revisit the Starter; How did we solve the problem with the boats?
Assessment:	→ Review <i>8_Worksheet</i>