

Gifted Enrichment Plan

Teacher: Lord
Grade Level: 2nd

Start Date: Week of 8/12
Unit Title: Innovation Creation

Louisiana Student Standards:

Math

- 2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.
- 2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.

ELA

- W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
- W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
- W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
- SL.2.5 Create audio recordings of stories or poems with guidance and support from adults and/or peers; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

Objective:

- Students will demonstrate an understanding of the invention process by identifying a problem, designing a product, creating a prototype, developing a budget, calculating profit, and planning for advertisement.
- Students will apply critical and creative thinking skills to develop a unique solution to a real-world problem.
- Students will learn to collaborate, communicate, and present their ideas effectively.

Science & Engineering Practice (Check the ones that apply)

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Cross Curricular (Check the ones that apply)

- Math
- Science
- Social Studies
- Reading
- Writing
- 21st Century Technology Skills
- Tied to Field Trip

Week 1: Engage

Objective: Students will identify a real-world problem and brainstorm ideas for a product or invention that could solve it.

1. Begin with a discussion on problem-solving and inventions. Talk about famous inventors and their contributions.
2. Introduce the concept of identifying a problem that needs solving. Discuss various problems students have encountered and problems they are passionate about.

What is Shark Tank? (Task 1)

3. Have them brainstorm ideas to focus on. (Task 3)
4. Students will pick one idea and brainstorm potential solutions and inventions to address the chosen problem.
5. Present their chosen problem and potential solutions to the class.

Week 2: Explore

Objective: Students will design a prototype of their invention.

1. Review the concept of prototypes and their importance in the design process; Define the problem, Research, Ideate, Prototype, Test, Evaluate, and Improve. (Task 4)
2. Students will sketch their invention. Encourage creativity and innovation.
3. Shark Tank Terms (Task 2)
 - a. **Vocab**

Week 3: Explore

Objective: Students will develop a budget and calculate potential profit for their invention.

1. Finalize design.
2. Create a budget and selling point in order to have a profit. (Task 6)

Week 4 & 5: Explore

Objective: Students will finalize the design and create a prototype of their invention.

1. Review the concept of prototypes and their importance in the design process; Define the problem, Research, Ideate, Prototype, Test, Evaluate, and Improve.
2. Provide materials for creating a physical prototype (craft supplies, recyclables, etc.).
3. Students will work on building their prototypes, making sure to consider functionality and how the invention solves the identified problem.
4. Provide assistance in calculating accurate measurements, dimensions, and making adjustments to their prototypes.
5. Each group presents their prototype to the class, explaining how it addresses the problem.
6. Encourage peer feedback and collaboration for improvements.

Week 6: Explain

Objective: Students will plan and create an advertisement for their invention. (Task 5)

1. Discuss the importance of advertising in promoting a product and attracting customers.
2. Introduce the importance of effective communication and marketing- 4Ps.
3. Teach basic concepts of advertisement, target audience, and persuasive language in English Language Arts.
4. Help students create a simple pitch for their product.
5. Explain different advertising techniques (TV commercials, posters, social media, etc.).
6. Students will brainstorm and plan an advertisement for their invention.
7. Students will use the chromebook for researching advertising strategies and creating digital materials (posters, videos, etc.).
8. Each group presents their advertisement plan to the class.

Week 7: Evaluate & Reflect

Objective: Students will present their invention, prototype, budget, and advertisement plan to the class and reflect on the entire process.

1. Each group will give a formal presentation to the class, showcasing their invention, prototype, budget, and advertisement plan.
2. After each presentation, allow time for questions and feedback from the class.
3. Teacher will facilitate a group discussion on the overall experience. Ask students to reflect on what they learned, challenges they faced, and how they worked as a team.
4. Encourage students to consider how their invention could impact the world and improve people's lives.
5. Students will be given an opportunity to make adjustments before presenting for the "Shark Tank"

Week 8: Final Presentation

Objective: Students will present their product and final pitch to a panel of judges.

1. Judges will have an opportunity to ask questions and invest in the company's idea.
2. Judges will have a score sheet to give back to the company for feedback.

Additional Teacher Resources: