

Unit Title: Key Ideas & Details

Grade Level: 2

Subject Area: Science

Duration/Length/Number of class periods: 3

Description:

Through the course of this unit, students will listen to the telling of The Gingerbread Man. They will then create their own boat that will get the gingerbread man across the river without getting wet. Students will test their boat and then reflect on what they learned through writing as well as using Seesaw.

Established Goals (National, State, Local):

2.1.2.2.1 Identify a need or problem and construct an object that helps to meet the need or solve the problem. For example: Design and build a tool to show wind direction. Another example: Design a kite and identify the materials to use.

2.1.2.2.2 Describe why some materials are better than others for making a particular object and how materials that are better in some ways may be worse in other ways. For example: Objects made of plastic or glass.

What Enduring Understandings are desired?

Various types of materials can be used in construction, however they will not all work the same way. Collecting evidence as students complete the trial and error process will affect the final outcome. One must have evidence to draw conclusions to support the hypothesis.

What Essential Questions will be considered?

How can reading and science be used in correlation to become engineers when learning something new?
How do different materials change the strength or weakness of the boat?
How can problem solving be used to help better your boat?
Is it okay to test your product early to help determine ways to improve or change it?

Students will know / be able to:

Describe the materials used to create their boat.
Solve problems independently through trial and error.
Share what they learned using technology.

Description <i>Units must include at least one of each formative, summative, introductory activity and learning activity. Check the appropriate box; one per row.</i>	Fo m a t i v e	Su m m a t i v e	Intr o d u c t o r y A c t i v i t y	Lea r n i n g A c t i v i t y	Stu d e n t T e c h n o l o g y U s e d	Teac her T e c h n o l o g y U s e d	I S T E S t a n d a r d s
Read the traditional story of The Gingerbread Man.			x				
Students are paired up to build a boat for the Gingerbread Man. They will select various materials that they think will best carry their man across the river to keep him from getting wet. Students will put their ideas on paper and as well as the materials they plan to use to build their boat. They will record their tests and ideas on paper.	x						
Provide a variety of building materials: toothpicks, clay, blocks, paper, cardboard, plastic, foam.							
Students will test their boat / make adjustments where needed, and record their findings using Flipgrid.				x	Flip g r i d		2d, 3c
Each pair of students will present and record their final boat test with the class using Digital Portfolio on Seesaw.				x	iPod, S e e s a w		2b
Using an iPad, students will add a comment or react to other student's posts using Seesaw.				x	iPod, S e e s a w		2b, 3d
Students will write a reaction to the experiment sharing: what they felt worked or didn't work, with their new knowledge would they use the same materials (why/why not). Students will write their reflection on paper and share with the teacher.		x					
The final digital portfolio is shared with families.				x	iPod, S e e s a w	Email /text	2b

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Materials, tools and resources
Materials: straws, popsicle sticks, tape, pipe cleaners, sticks, tinfoil, foam, cork, plastic, play
Resources: The Gingerbread Man by: Jim Aylesworth

Unit Plan Author Jessica Van Batavia, Luverne Elementary School

Additional credit given to Seesaw, Flipgrid, Mn Department of Education (State Standards)