

AGENDA

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- 3 James and the Giant Peach
- 4 Louisiana Regional STEM Network
- 5 STEM Literacy
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Engineering Mindset



Ten skills and attitudes including using math and science, iteration, persistence, teamwork, and envisioning multiple solutions that engage girls in developing mindsets of engineers and scientists.

10 Practices for an Engineering Mindset

Use a systematic engineering design process

Balance criteria and constraints

Consider real-world problems

Explore materials

Persist and learn from failure

Identify as engineers

Envision multiple solutions

Apply math and science

Evaluate and iterate

Work in teams



Use a systematic problem-solving process



While the products of engineering may vary, the problem-solving process used to create them is similar. In professional engineering settings, an engineering process may have dozens of phrases.



Systematic Problem-Solving Process

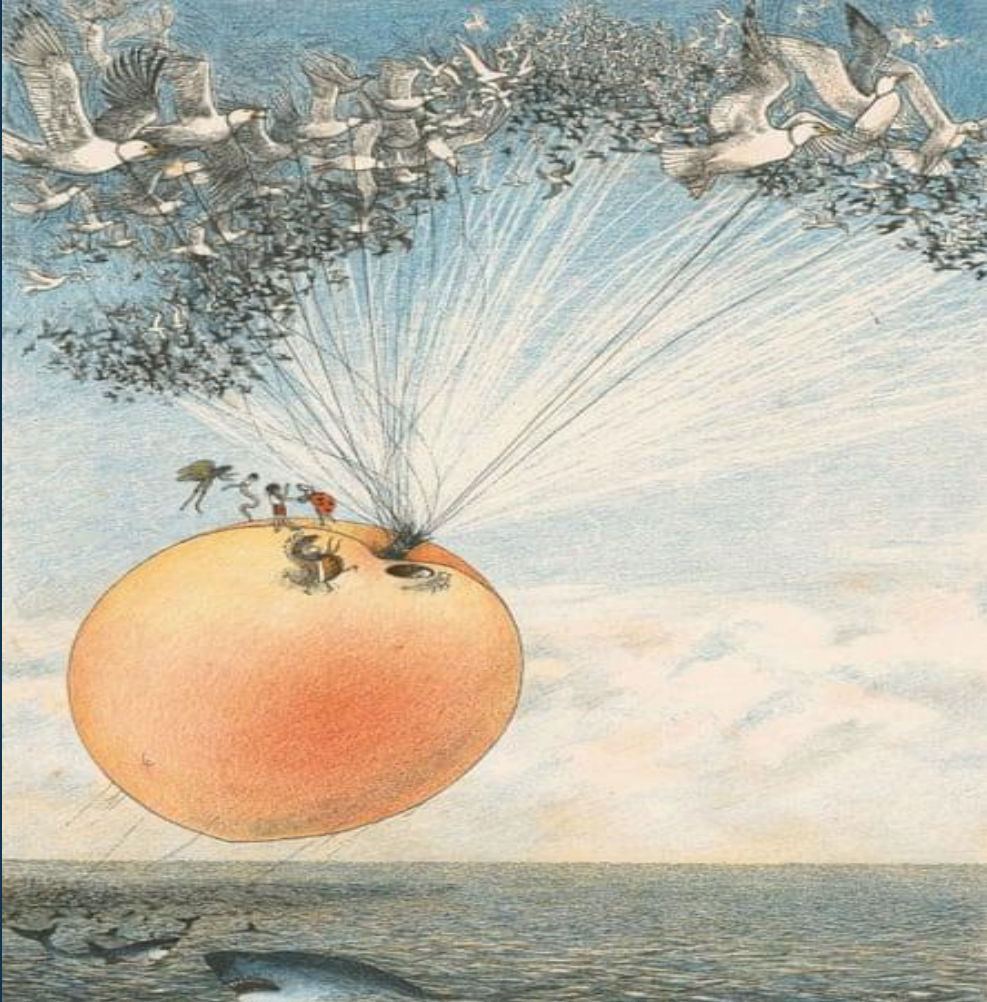
- Defining the problem
- Brainstorming ideas
- Developing a plan
- Constructing a model
- Testing and analyzing performance
- Improving the design

SCILS Region 8 STEM Center



In 2022, SCILS at Louisiana Tech University was on hand to distribute free STEM kits during the 2022 Peach Festival. Developed by the SCILS Director to compliment the annual festival, the kits focused around the beloved children's book "James and the Giant Peach"

James and the Giant Peach



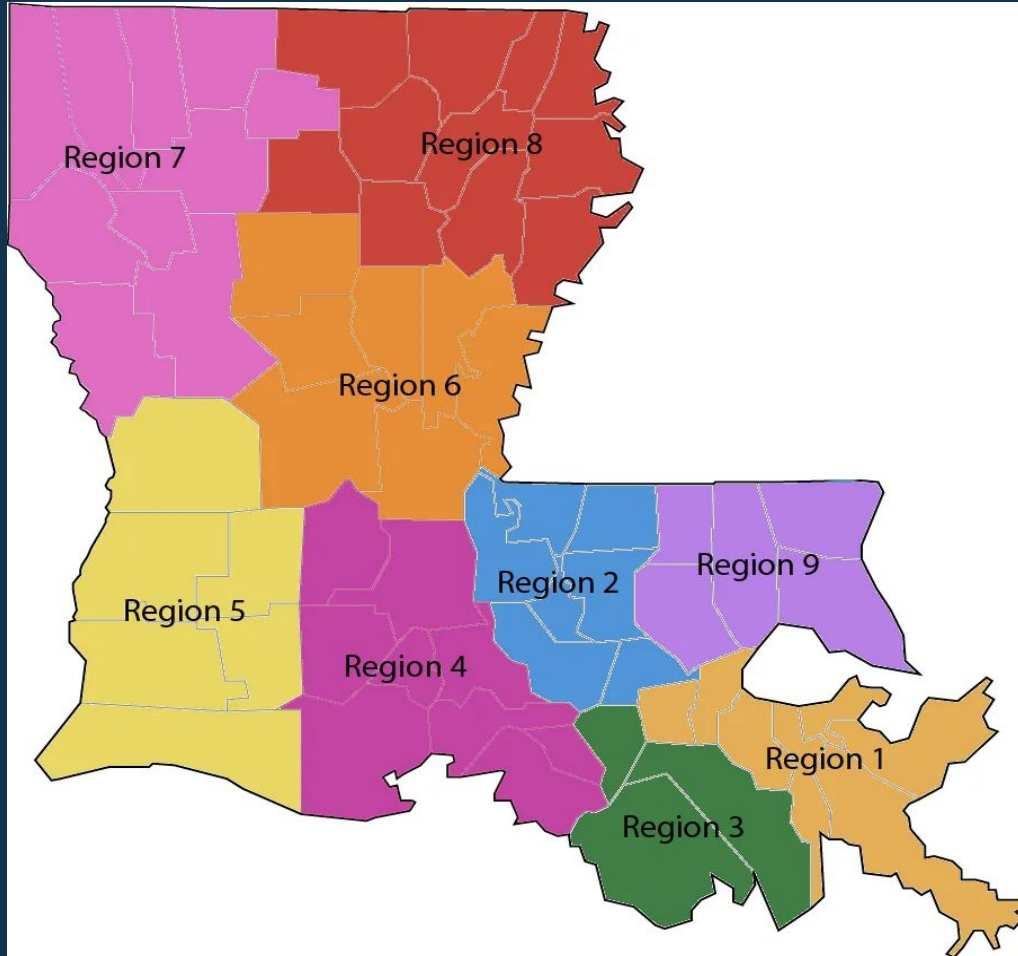
The kits featured a design activity that allows children to create the most effective zip-line to get James down from the giant flying peach and help the insects on the ground. Kits included a copy of the book along with materials for the zip line experience and suggested instructions.

Experiential Learning

The process of learning by doing



Louisiana Regional STEM Network



A system of organizations that lead STEM initiatives strategically located throughout Louisiana. The purpose of the network is to enhance access to STEM education, participation, and advancement from Pre-K to Grey.

Program
Sustainability

Parent
Engagement

Community
Engagement

STEM Literacy

Contact Us!

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THANK YOU!

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