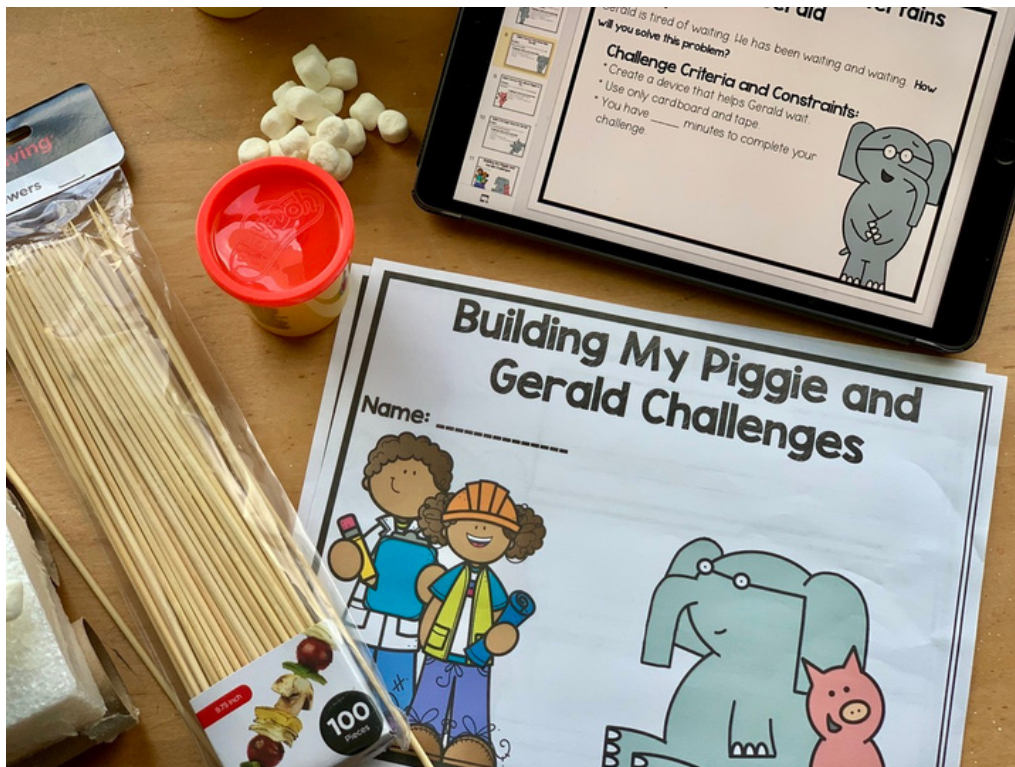


Makerspace

Task Cards

Piggie and Gerald Challenges



**Lesson Plans,
Resources,
Makerspace Task
Cards**



TRINA DEBOREE

3- Design Thinking

Each Makerspace Task Card offers an opportunity for students to work through the Engineering Design Process.

Why



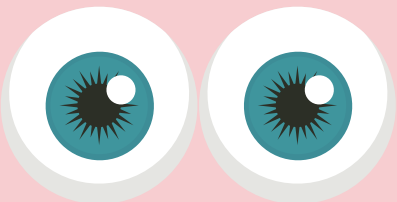
2 -Lit Extension

Solving problems presented by the character takes comprehension further.

I- Open-Ended

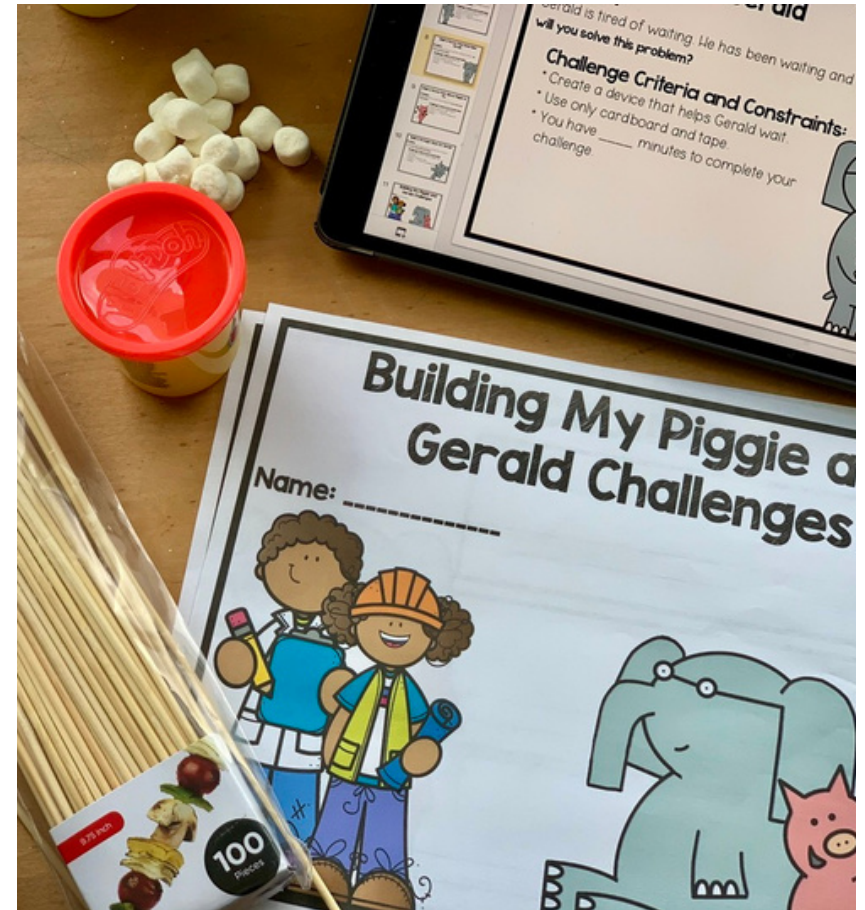
Open-ended challenges allow students to practice critical thinking skills and problem-solving skills.

Keep Scrolling to See Inside!



Perfect for:

- Makerspace
- Encourage Reluctant Learners
- Literature Extension
- Centers
- Critical Thinking
- Creativity
- Collaborative Work



Piggie and Gerald Makerspace

HOW TO USE:

A Makerspace is a space where students can gather to create, invent, tinker, explore, and discover using a variety of tools and materials. In a nutshell, it is an astonishing place to think and learn!

Read a Piggie and Gerald story by Mo Willems and then challenge students to work through solutions to the problems in the story. Keep the solutions open-ended to avoid doing a craft and focus more on twenty-first-century skills.

TUNE INTO ONE TIRED TEACHER FOR MORE ON MAKERSPACE



Essential Questions, Makerspace Resources, and Lesson Plan



MAKERSPACE Essential Questions

- * How do makers ask and answer questions based on observation and investigation to find more information about the natural and designed worlds?
- * How do makers define a simple problem that can be solved by the development of a new or improved tool?
- * How do makers determine the difference between a model and an actual object, process, or event?
- * How do makers compare, contrast, and identify models?
- * How do makers make and use a model?
- * How do makers work with tools and materials to design and build a device that solves a particular problem or a solution to a problem?
- * How do makers compare multiple solutions?
- * How do makers share findings with others?
- * How do makers record information about their work and outcomes?

MakerSpace Resources

A Makerspace is a place where students can gather to create, invent, tinker, explore and discover using a variety of tools and materials. In a nutshell, it is an astonishing place to think and learn!

The thing I love most about a **Makerspace is it can be anything**. There are **no limits** only possibilities. It is an environment that is only restricted by one's imagination. It is a wonder of discovery, and it can include ANY subject.

Piggie and Gerald Building Challenges

Teacher Page 1

Maker Description:

Students will design and build a variety of solutions for Piggie and Gerald based on Piggie and Gerald books by Mo Willems using the engineering design process.

Essential Questions:

- How do makers define a simple problem that can be solved by the development of a new or improved tool?
- How do makers determine the difference between a model and an actual object the model represents?
- How do makers compare, contrast, and identify models?
- How do makers make and use a model?
- How do makers use tools and materials to design and build a device that solves a particular problem or a solution to a problem?
- How do makers compare multiple solutions?
- How do makers share findings with others?

Vocabulary:

model, observation, investigation, solutions

Standards:

K-2-ETS-1-1

Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS-1-2

Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS-1-3

Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

Be sure to check out my blog series below. It is helpful if you need evidence for a PDP/PGP!

[Makerspace](#) by Trina Deboree

[Inspire You](#) by Trina Deboree

Deboree

Deboree

[Makerspace](#) by Trina Deboree

[Makerspace](#) by Trina Deobree

and it can be a focus on STEM (An INTEGRATION of science, engineering, and math.) The purpose of the NGSS is to integrate these two practices. Personally, I think when we focus on making learning and understanding scientific concepts through hands-on learning opportunities for children to learn through

Open-Ended Challenges

Build a Mode of Transportation Piggie and Gerald

Problem:

Piggie and Gerald are playing a game of Drive Drive Drivey-Drive Drive. Then they decide it is time to take a drive for real! However, they don't have a car. **How will you solve this problem?**

Challenge Criteria and Constraints:

- * The mode of transportation must hold both characters and all of their stuff.
- * The mode of transportation must be able to move from one place to another.
- * You have _____ minutes to complete the challenge.

Build a Cover for Piggie and Gerald

Problem:

Piggie and Gerald want to play outside. Then it starts to rain. **How will you solve this problem?**

Challenge Criteria and Constraints:

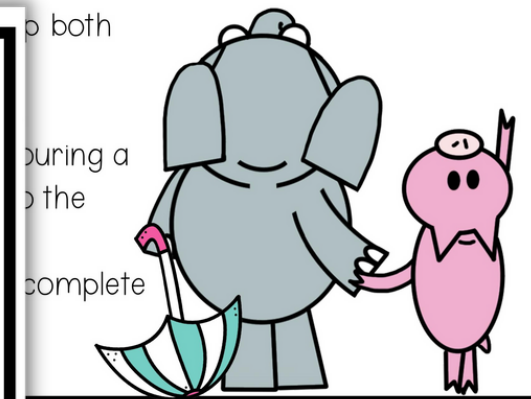
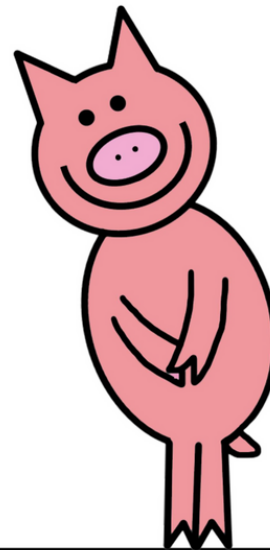
Build a New Toy for Piggie

Problem:

Piggie is playing with her new toy, but it broke. **How will you solve this problem?**

Challenge Criteria and Constraints:

- * Construct a new toy for Piggie.
- * Use building blocks.
- * You have _____ minutes to complete your challenge.
- * Your toy has to be able to withstand dropping from waist height.

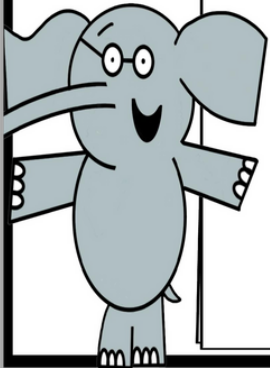


Work Through Engineering Design Process (Print or Digital)

Imagine My Solution

My Plan For Making My Solution

Materials Needed:

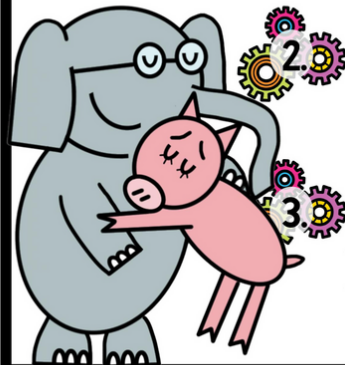


Reflect Upon and Improve My Solution

All About My Solution

Ask My Questions

Engineers and scientists ask lots of questions. Think about your problem. Now formulate questions about your problem or around your solution.



How Did It Go?

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About the Author

Trina Deboree has over 17 years of teaching experience in first and second grade. Trina has also been a Student Support Specialist and a Media Specialist. She earned her Master's Degree in Education Technology and Media Design and was formally Nationally Certified in Early Childhood Generalist.

Trina is a single mom of 2 incredible young people and a dog mom of Kobe her Goldendoodle. Trina is passionate about serving teachers and helping them instill a love for learning.



Let's Connect

TEACHING AND LEARNING



TRINA DEBOREE

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**Let me know if you have
any questions.**



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