

STEM

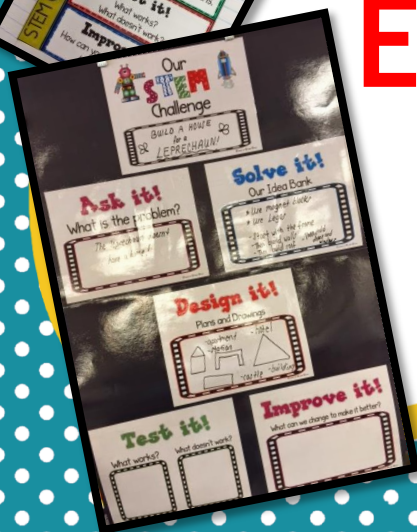
Teaching Tools

for

Elementary

Students

by Brooke Brown



My Third Grade

Journal

Name: Ellie

During **STEM** Challenges, we will...

- 1 Ask questions.
- 2 Solve problems.
- 3 Design a plan.

our project.

our project.

Our **STEM** Challenge

BUILD A HOUSE for a LEPRECHAUN!

Ask it!

What is the problem?

The leprechaun doesn't have a house!

Solve it!

Our Idea Bank

- Use magnet sticks
- Use Legos
- Start with the frame
- Then build walls
- May need paper and glue

Design it!

Plans and Drawings

• apartment • hotel

• station • castle

• building

Test it!

What works?

What doesn't work?

Improve it!

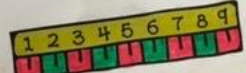
What can we change to make it better?

What does a **SCIENTIST** do?

What does a **TECHNICIAN** do?

What does an **ENGINEER** do?

What does a **MATHEMATICIAN** do?



What is **STEM**?



Name: Ellie

Me as a **SCIENTIST**



Me as a **TECHNICIAN**



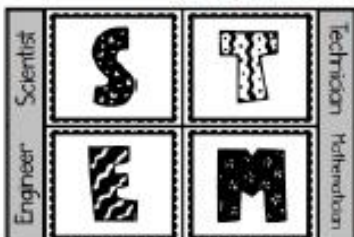
Me as a **MATHEMATICIAN**



Me as an **ENGINEER**



What is STEM?



My STEM Mini Journal

How can we solve the problem?

Idea Book

What worked well?

What didn't work?

Ask it!

What is the problem?

My Design!

What can we change to make it better?

STEM Organizers for ANY challenge!

STEM Presentation

- 1 What did you create?
- 2 What materials did you use?
- 3 Which "smarts" did you use while designing and creating this project? (Include a picture of your team and your project!)
- 4 What is your favorite thing about your project?
- 5 What was most challenging about this project?
- 6 How could you improve your project?

STEM Process Flipbook

Ask it!
What is the problem?

Solve it!
What are your ideas for solving the problem?

Design it!
Draw a picture of your plans

Test it!

STEM Reflection & Presentation

Name: _____

What did you present?

What did you learn?

What did you like about your project?

What did you not like about your project?

What did you learn about your project?

Thinking Cards Pocket

What is the problem?

What are the materials?

What are the steps?

What is STEM?

Name: _____

What is STEM?

Thinking Cards

What is the problem?

What are the materials?

What are the steps?

STEM Thinking Cards

What is the problem?

What are the materials?

What are the steps?

STEM Thinking Cards

What is the problem?

What are the materials?

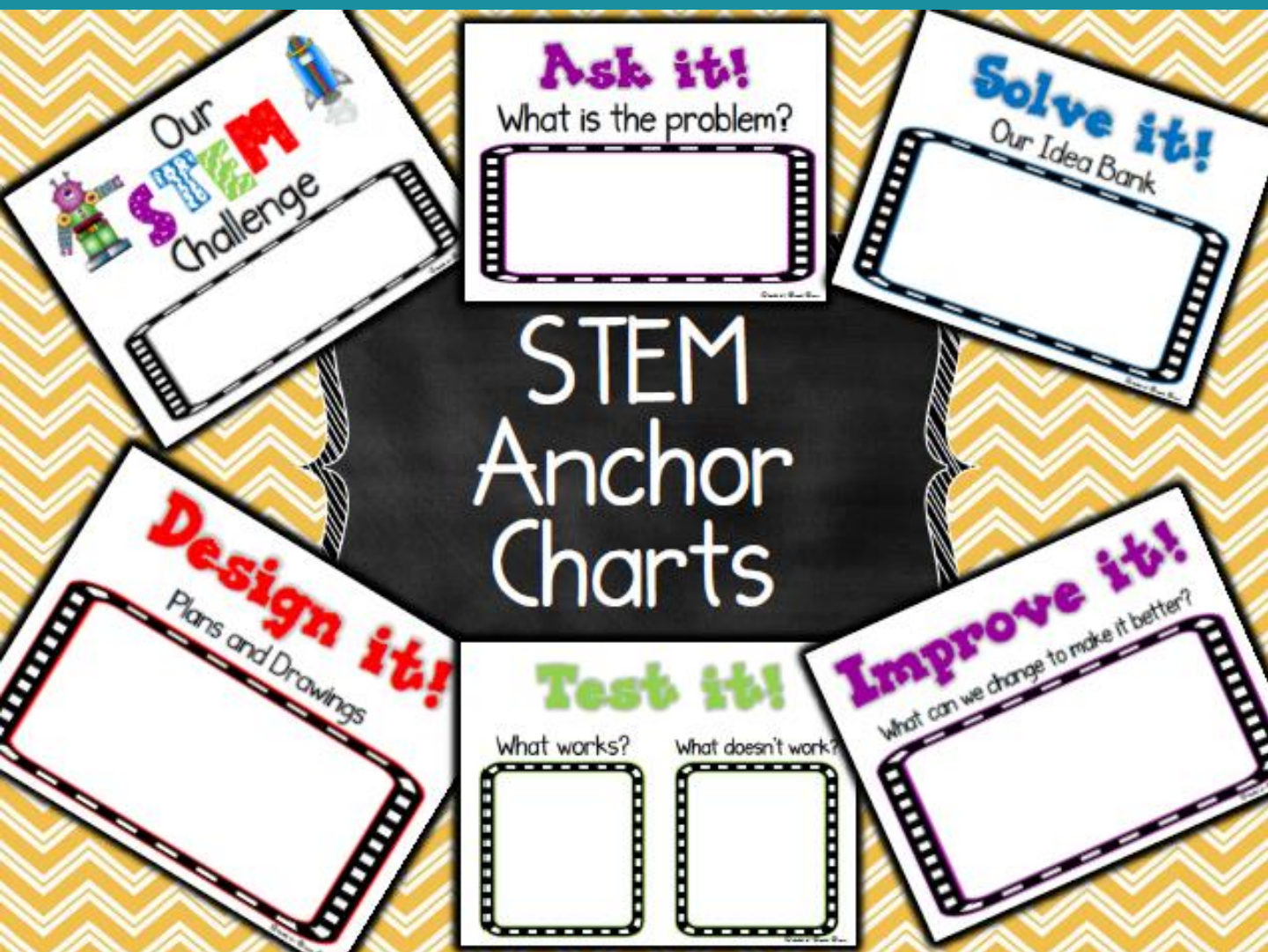
What are the steps?

STEM Thinking Cards

What is the problem?

What are the materials?

What are the steps?



Ask it!
What is the problem?

Solve it!
Our Idea Bank

Design it!
Plans and Drawings

Test it!

What works?

What doesn't work?

Improve it!
What can we change to make it better?