

# STEM

## Teaching Tools

for

## Elementary

## Students

by Brooke Brown



My  
Third Grade

STEM

Journal

Name: Ellie

SEWN PAGES

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

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

our project.

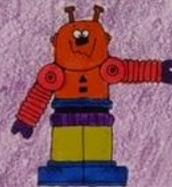
our project.

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

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 blocks  
• Use Legos  
• Start with the frame  
• Don't build walls  
• Don't build roof

**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? [ ]

Me as a **SCIENTIST**



Me as a **TECHNICIAN**



Me as a **MATHEMATICIAN**



Me as an **ENGINEER**



### What is STEM?

Great! Read about each one. Circle the one you like best. Draw a picture of it. Write the name of the one you like best.

Scientist			Technician
			

### My STEM Mini Journal

How can we solve the problem?

Step 1: \_\_\_\_\_

because \_\_\_\_\_

What worked well? \_\_\_\_\_

What didn't work? \_\_\_\_\_

### Ask it!

What is the problem?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Design it!

My Design:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What can we change to make it better?

\_\_\_\_\_

# STEM Organizers for ANY challenge!

### STEM Challenge

Challenge: \_\_\_\_\_

Materials: \_\_\_\_\_

Procedure: \_\_\_\_\_

Conclusion: \_\_\_\_\_

### My Grade Journal

Name: \_\_\_\_\_

### 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 learn from this project?

What was the most interesting part of the project?

What would you do if you had more time?

### STEM Presentation

- 1 What did you create?
- 2 What materials did you use?
- 3 Which "smarts" did you use while designing and creating the project? (You can't name more self people together's body words)
- 4 What is your favorite thing about your project?
- 5 What was most challenging about the project?
- 6 How could you improve your project?

### Thinking Cards Packer

What is STEM?

\_\_\_\_\_

### What is STEM?

Thinking Cards

\_\_\_\_\_

### What is STEM?

Name: \_\_\_\_\_

### STEM Thinking Cards

\_\_\_\_\_

Our **STEM** Challenge



**Ask it!**  
What is the problem?



**Solve it!**  
Our Idea Bank

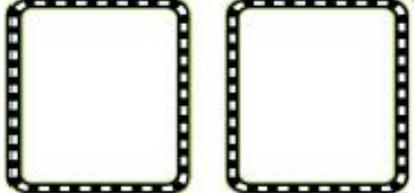


# STEM Anchor Charts

**Design it!**  
Plans and Drawings



**Test it!**  
What works?      What doesn't work?



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

