

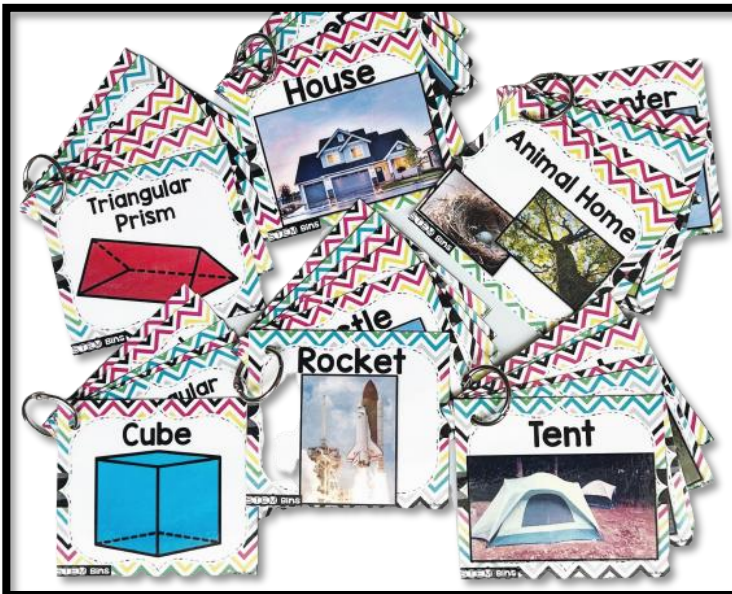
STEM Bins[®]



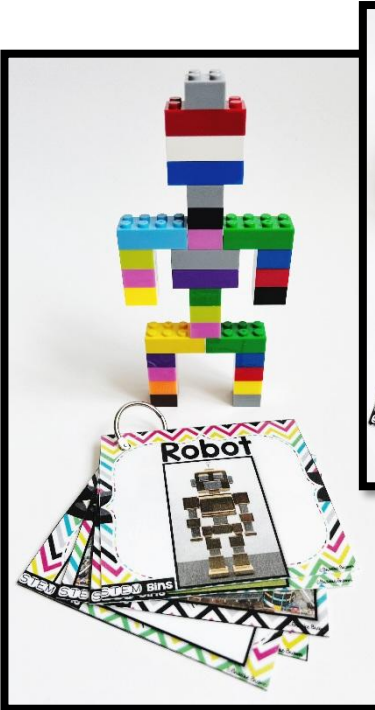
created by Brooke Brown

SIMPLE PLAY-BASED ENGINEERING for K-5th Grade

- Early Finishers
- Centers
- Morning Work
- Incentives
- Writing Extensions
- Fine Motor Practice
- Calm Down Corner
- Teambuilding
- Makerspace



INTERCHANGEABLE TASK CARDS & MATERIALS



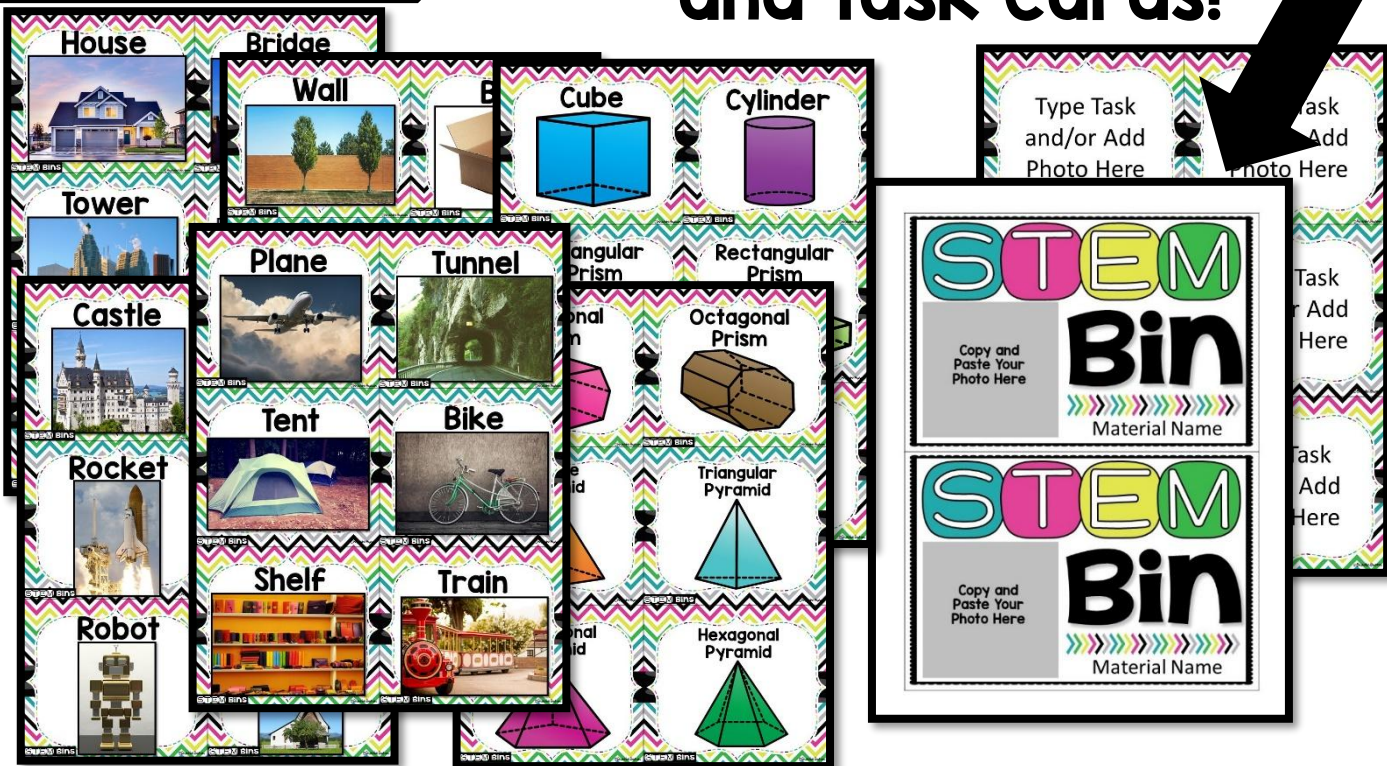
**STUDENTS CAN
CHOOSE ANY
STEM BIN &
ANY TASK CARD!**



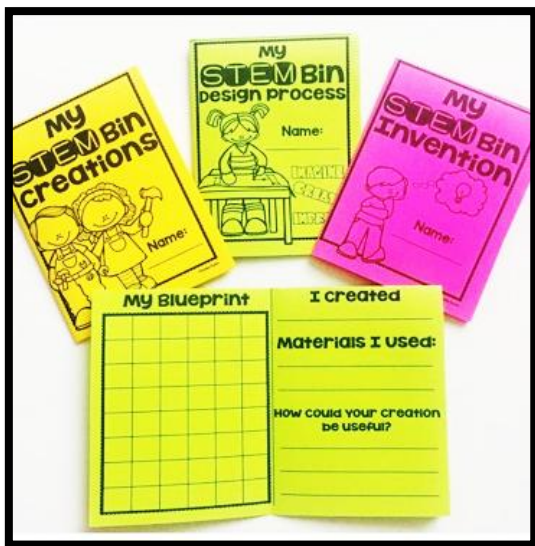


**20 COVERS &
36 TASK CARDS**

**Edit Your Own Materials
and Task Cards!**



WRITING EXTENSIONS, RUBRICS, MANAGEMENT TIPS, & MORE!



WRITING PROMPTS

- Write sentences to tell how your structure looks and feels. Write about the colors, shapes, and sizes of different parts.
- Write directions to tell someone how to build your structure. Use the words: First, Next, Then, and Last.
- Make up a story that uses your structure as the setting (place) of the story.

STEM BINS TEACHER CHECK-UP			
NAME: _____			
TASK OR CHALLENGE	3	2	1 NOT ASSIGNED
STEM Bin creation matches the task card			
Writing extension or booklet is FULLY completed and student used BEST effort.			
Student FULLY cooperated with partner or group members.			
Student showed perseverance, focus, and task commitment.			
Student showed creativity and problem solving.			
TOTAL POINTS: _____			
COMMENTS: _____			

CHALLENGE YOURSELF

IMPROVE YOUR STRUCTURE!

- Can you make it taller or wider?
- Can you make it hold weight?
- Can you use all the pieces?

STEM BINS SELF CHECK-UP			
NAME: _____			
TASK OR CHALLENGE:			
Circle one choice in each row.			
😊	😐	😞	NOT ASSIGNED
My STEM Bin creation matches my task card.			
I FULLY completed my writing extension or booklet.			
I FULLY cooperated with my partner or group members.			
I showed perseverance, focus, and task commitment.			
I showed creativity and problem solving.			
My STEM Bin creation DOES NOT match my task card.			
I PARTIALLY completed my writing extension or booklet.			
I SOMEWHAT cooperated with my partner or group members.			
I showed SOME perseverance, focus, or task commitment.			
I showed SOME creativity and problem solving.			
I DID NOT complete my writing extension or booklet.			
I STRUGGLED to cooperate with my partner or group members.			
I DID NOT SHOW perseverance, focus, or task commitment.			
I DID NOT SHOW creativity and problem solving.			

STEMBins®	
WEEKLY ROUTINES	
MAKER MONDAY	Free Inventing (No Task Cards)
TASK CARD TUESDAY	Task Cards Only
WRITING WEDNESDAY	Use Quick Writes
THINKING THURSDAY	Teacher Presents a Specific Challenge
FRIEND FRIDAY	Engineer with a Partner or Small Group

My STEM Bin Creations



Name: _____

BUILD, DRAW, and WRITE

Name: _____

EDITABLE EXPECTATIONS AND STUDENT ROTATION CHARTS

STEM BINS EXPECTATIONS
Type Expectations Here

STEM BINS EXPECTATIONS	
What will STEM Bins time LOOK like? 	What will STEM Bins time SOUND like? 
Type Student Responses Here	Type Student Responses Here

STUDENT GROUPS			
GROUP 1	GROUP 2	GROUP 3	GROUP 4

STEM BINS ROTATION			
GROUP 1	GROUP 2	GROUP 3	GROUP 4

STEM BINS ROTATION			
GROUP 1	GROUP 2	GROUP 3	GROUP 4
MATERIAL	MATERIAL	MATERIAL	MATERIAL

STUDENT GROUPS				
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE

STEM BINS ROTATION				
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS

STEM BINS ROTATION				
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL

STUDENT GROUPS					
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE	LIST STUDENTS HERE

STEM BINS ROTATION					
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS	MATERIALS AND/OR INSTRUCTIONS

STEM BINS ROTATION					
GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL
MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL	MATERIAL

36 Upper Grade Task Cards and Response Sheets!

STEM Bin Response

Name: _____
Date: _____

Complete the task card inside the STEM Bin you selected. Draw your design below. Then, answer the critical response questions below using complete sentences.

Draw your creation/design below to the best of your ability.



Describe what you drew above. Include the dimensions and three-dimensional angles (acute, obtuse, right), if applicable.



STEM Bin Response

Describe the process you used to tackle your STEM Bin challenge using the materials in the STEM Bin. Use temporal words to describe what you did first, second, next, etc.

Identify what was most challenging about the STEM and task card you selected. Do you think the task would be easier with one of the other STEM Bins? If so, which one and why.

Upper Grade Extensions

The following twelve task cards are provided for use with students in third grade and up. They contain no photo cues and require students to respond in writing after completing the task using the provided templates on pages 22 and 23.

You may choose to open up additional construction tools for upper grade students such as glue, tape, or other necessary school supplies as they create more elaborate structures. You may also choose to combine materials and allow them to utilize more than one STEM Bin material in their creations.

If you have additional construction materials on hand, please use the separate file for EDITABLE Covers and Task Cards to design your own.

Special thanks to Kimberly Lehanka for her expertise in creating these extensions for older students.

BUILD, DRAW, and WRITE

Name: _____



Using the items in your STEM Bin, create a structure that represents YOU and your personality.

Using the items in your STEM Bin, create a structure that is STRONG enough to be blown without collapsing.

Using the items in your STEM Bin, create a structure with at least three levels.

Using the items in your STEM Bin, create a structure that contains a three-dimensional PRISM.

Using the items in your STEM Bin, create a realistic model of a BUILDING in your community.

Using the items in your STEM Bin, create a realistic model of an ANIMAL HABITAT.

Using only the items in your STEM Bin, construct a GAME that can be played by others.

books without collapsing.

Using only the items in your STEM Bin, construct an INCLINED PLANE or RAMP.

Using as many items as possible from your STEM Bin, construct a SYMMETRICAL structure.

Using only the items in your STEM Bin, construct any three-dimensional figure.

Using the items in your STEM Bin, construct a structure with at least one RIGHT ANGLE (90°).

Using the items in your STEM Bin, construct a structure with at least one OBTUSE ANGLE (more than 90°).

Using the items in your STEM Bin, create an ENCLOSURE that completely surrounds your pencil box.

Using the items in your STEM Bin, create a structure that withstands the weight of one book without collapsing.

Using the items in your STEM Bin, create a realistic model of any mode of TRANSPORTATION.

Using the items in your STEM Bin, construct a structure with at least one ACUTE ANGLE (less than 90°).

Using the items in your STEM Bin, create a structure with an AREA of at least 20 square inches.

Using the items in your STEM Bin, create a structure with an AREA of at least 24 square inches.

Using the items in your STEM Bin, create a TOY.

Using the items in your STEM Bin, construct a three-dimensional CUBE (6 faces).

Using the items in your STEM Bin, construct a POWER BOAT.

Using the items in your STEM Bin, construct a BOAT.

TECHNOLOGY

- Measurement Tools
- Digital Organizers
- Audio & Video Explanations

ENGINEERING

- Creating, testing, & improving models
- Time & material constraints
- Problem solving
- Structural integrity

SCIENCE

- Properties of objects
- Composing & decomposing materials
- Balance & weight distribution

MATH

- Measurement
- Volume & Capacity
- 2D & 3D Shapes
- Angles & Lines

ARTS

- Creative Design
- Architecture
- Sculpting Techniques

SOCIAL

- Collaboration
- Communication
- Achieving common goals

LITERACY

- Creative Writing
- Labels & Descriptions
- How-to Writing

AFFECTIVE

- Perseverance
- Logic
- Self-discipline
- Creativity
- Resourcefulness

why
STEM
Bins?

STEAM



Bins

Full STEAM Version
Included!

STEAM



Bin

Pattern Blocks

STEAM



Bin

Unifix Cubes

STEAM



STEAM



Bin

Dominoes

STEAM



Bin

LEGO

STEAM



Bin

Pipe Cleaners

STEAM



Bin

Dixie Cups

STEAM



Bin

Popsicle Sticks and Velcro

STEAM



Bin

Index Cards and Tape

STEAM



Bin

Playdough and Toothpicks

CHECK OUT THE MEGA BUNDLE WITH ALL 10 STEM BINS RESOURCES!

**20%
OFF!**

