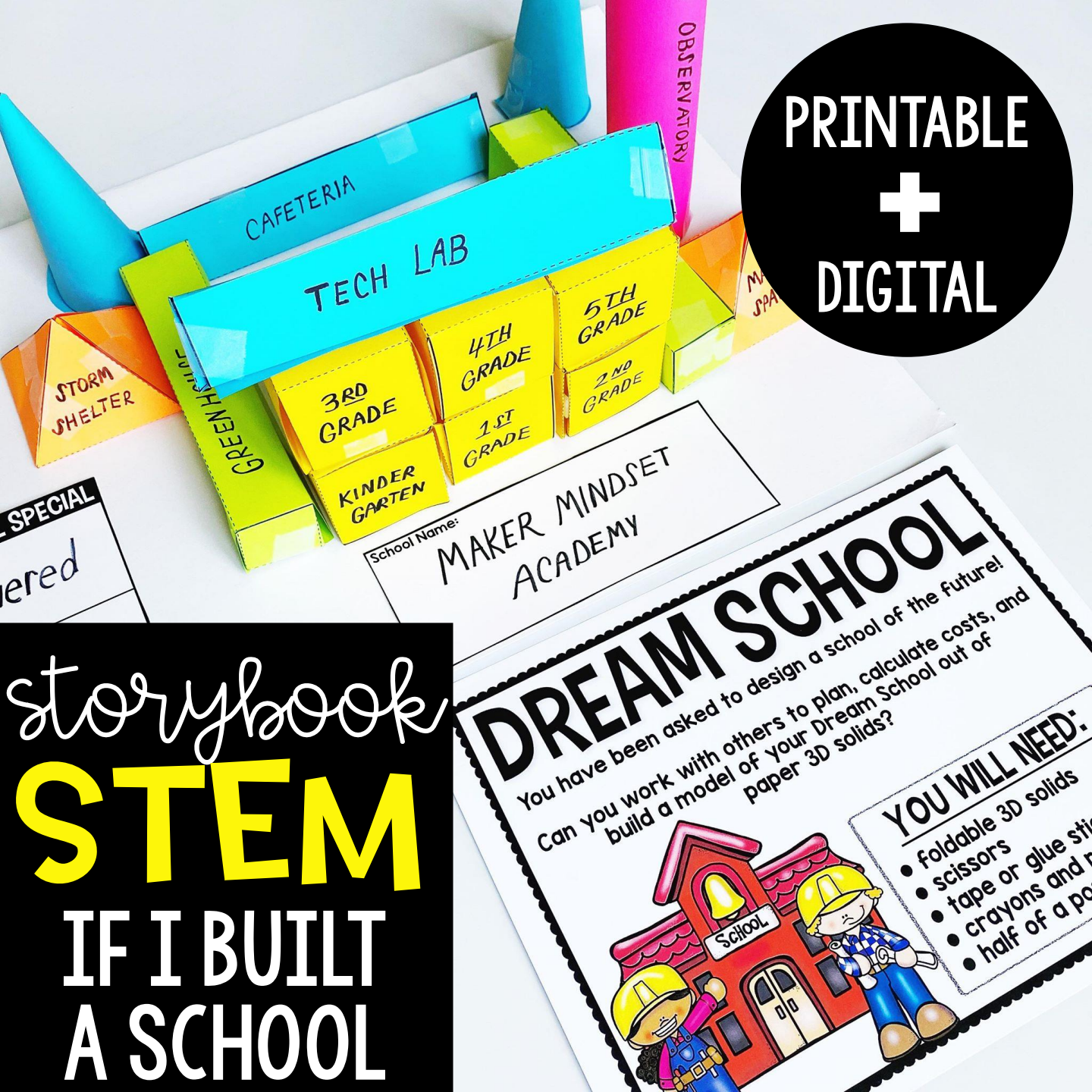


PRINTABLE  
+  
DIGITAL

storybook  
**STEM**  
IF I BUILT  
A SCHOOL



# storybook **STEM**



## IF I BUILT A SCHOOL

©BROOKE BROWN & KATIE KIEING

**GOOGLE SLIDES  
& SEESAW  
FORMATS**

### WORDS TO KNOW

**NET**

**POLYHEDRON**

**ARCHITECT**

**PRISM**

Click and drag the words to match their definitions.



a person who designs buildings and supervises their construction



a 3D solid with rectangular faces and two bases that are exactly the same



a 3D solid that is made up only of flat polygons and straight edges



a flattened out 3D solid

**INCLUDES DIGITAL COMPONENTS!**

## WORDS TO KNOW

Click and drag the words to match their definitions.

NET

POLYHEDRON

ARCHITECT

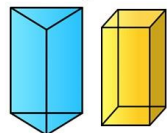
PRISM



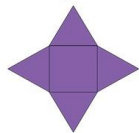
a person who designs buildings and supervises their construction



a 3D solid that is made only of flat polygons and straight edges



a 3D solid with rectangular faces and two bases that are exactly the same



a flattened out 3D solid

CLICK & SHARE  
WITH STUDENTS  
IN GOOGLE  
SLIDES

INTERACTIVE VIDEOS AND TEMPLATES

CLICK & ASSIGN  
ACTIVITIES  
IN SEESAW

Activity Library

Community My Library

storybookSTEM

IF I BUILT A SCHOOL

Brooke Brown

Assign...

Student Instructions

IF I BUILT A SCHOOL (STEM CHALLENGE)

CAN YOU PLAN AND VIRTUALLY BUILD YOUR DREAM SCHOOL OUT OF 3D SOLIDS?

Visit the link to visit websites and watch videos about 3D solids.

Tap [Link](#)

Follow the instructions on each slide:

WORDS TO KNOW: Tap to drag vocabulary words to match the definition.

3D SOLIDS: Count and type the number of faces, edges, and vertices for each 3D solid.

LET'S BRAINSTORM: Type your ideas in the boxes.

DREAM SCHOOL PLAN: Type your responses in the boxes.

DREAM SCHOOL:

Tap to drag the 3D solids to build your dream school.

Tap to add labels for each room.

WHAT IS THE TOTAL COST OF YOUR SCHOOL? Count and type your responses in the boxes.

MY DREAM SCHOOL: Type what makes your school special.

Tap

Students will edit this template

EXPLORE 3D

1/9



# DIGITAL STEM

## DREAM SCHOOL PLAN

SCHOOL NAME: \_\_\_\_\_

What kind of energy will your school use? \_\_\_\_\_

How will your school be protected from severe weather? \_\_\_\_\_

What kinds of technology will make your school "smarter"? \_\_\_\_\_

### CHECKLIST

- ☐ Classrooms
- ☐ Restrooms
- ☐ Library
- ☐ Cafeteria
- ☐ Gym
- ☐ Office
- ☐ Playground

## DREAM SCHOOL

Click and drag the 3D solids to build your school.

Add text: \_\_\_\_\_


## MY DREAM SCHOOL

What makes your Dream School special? \_\_\_\_\_

## DREAM SCHOOL

You have been asked to design a school of the future!

Can you plan, calculate costs, and build a virtual model of your Dream School?



## WHAT IS THE TOTAL COST OF YOUR SCHOOL?

3D SOLID	How many did you use?	COST PER SOLID	TOTAL COST OF MATERIALS
CUBE		50¢	
RECTANGULAR PRISM		\$1.00	
TRIANGULAR PRISM		\$1.00	
PYRAMID		\$1.50	
CYLINDER		\$2.00	
CONE		\$2.50	
<b>TOTAL COST OF SCHOOL</b>			

## 3D SOLIDS

Picture of Solid	Name of Solid	Number of FACES	Number of EDGES	Number of VERTICES
	SPHERE			
	CUBE			
	RECTANGULAR PRISM			
	TRIANGULAR PRISM			

## LET'S BRAINSTORM

Type your ideas in the box below.

WHAT I LOVE ABOUT OUR SCHOOL: \_\_\_\_\_

IMPROVEMENTS: \_\_\_\_\_

### WORDS TO KNOW


Click and drag the words to match their definitions.

NET


POLYHEDRON

ARCHITECT


PRISM




a person who designs buildings and supervises their construction



a 3D solid that is made up only of flat polygons and straight edges



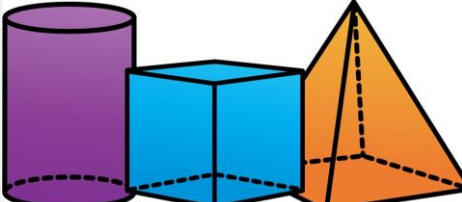
a 3D solid with rectangular faces and two bases that are exactly the same



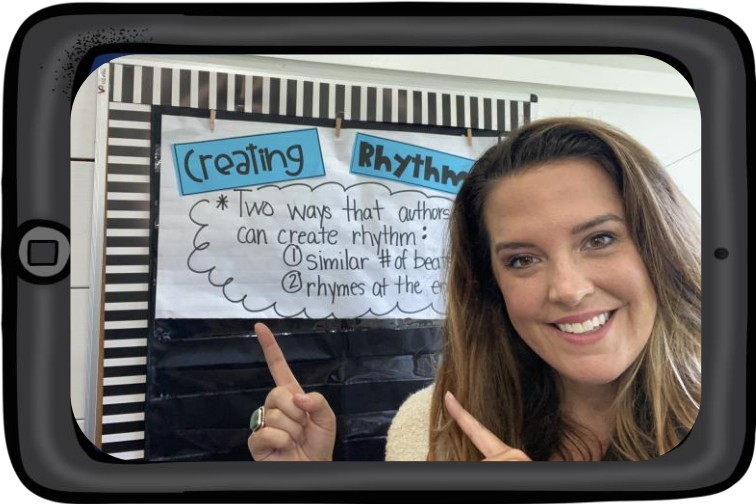
a flattened out 3D solid

## EXPLORE 3D SOLIDS

Go to the link in the instructions to visit websites and watch videos about 3D solids and structures.



# DIGITAL ELA



## VOCABULARY

Match the vocabulary word to the correct picture. Use each word twice.


## TEACHER TALK!

If I built a school, the first thing you'd meet are lots of cute puppies. They'd flock to your feet.

But why stop at puppies? Why not a whole zoo? So I'd add a bunch of big animals: too.

## Rhyme and Rhythm

Rhyme is when the ends of two or more words sound alike.



Rhythm is the strong regular pattern of beats in the words.



After watching the video and looking at the poster, practice hearing the rhythm of the words by looking at individual pages in the book.



Insert a picture you have taken to demonstrate each word and then write a sentence with that word. correct spot based on whether the statement is a fact or an opinion.

perimeter	system	FACTS	OPINIONS
 the length of the outside of a shape	 a group of things that work together		
 collide	 sprout		

## Fact & Opinion

**FACT:** A true statement that can be proven.



- Sunflowers need sunlight and soil to grow.
- Mae Jemison was the first African American woman in space in 1992.



**OPINION:** What someone thinks or how they feel about something.



- I think sunflowers are the best flower that there is.
- Being an astronaut is not worth it, because you have to be away from family.



## Now Think!



Practice discussing facts and opinions about the following:



**MY OPINION**  
about  
SCHOOLS  
in the  
Future:





# PRINTABLE STEM CHALLENGE

**DREAM SCHOOL BLUEPRINT** NAME: \_\_\_\_\_

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







**WHAT MAKES OUR SCHOOL SPECIAL**

1 

2 

**DREAM SCHOOL** If I Built a School NAME: \_\_\_\_\_

Can you calculate the total cost of your school?

3D SOLID	How many did you use?	COST PER SOLID	TOTAL COST OF MATERIALS
CUBE 		50¢	
RECTANGULAR PRISM 		\$1.00	
TRIANGULAR PRISM 		\$1.00	
PYRAMID 		\$1.50	
CYLINDER 		\$2.00	
CONE 		\$2.50	
<b>TOTAL COST OF SCHOOL</b>			

**DREAM SCHOOL**







You have been asked to design a school of the Future!

Can you work with others to plan, calculate costs, and build a model of your Dream School out of paper 3D solids?

**YOU WILL NEED:**

- Foldable 3D solids
- scissors
- tape or glue sticks
- crayons and markers
- half of a poster board

**3D SOLIDS**

Picture of Solid	Name of Solid	Number of Faces	Number of Edges	Number of Vertices
	SPHERE			
	CUBE			
	RECTANGULAR PRISM			
	TRIANGULAR PRISM			
	PYRAMID			
	CONE			

**DREAM SCHOOL** If I Built a School NAME: \_\_\_\_\_

**TECH LAB**

3RD GRADE 4TH GRADE 5TH GRADE  
KINDER GARTEN 1ST GRADE 2ND GRADE

**MAKER MINDSET ACADEMY**

**DREAM SCHOOL**

**ARCHITECT** a person who designs buildings and supervises their construction

**POLYHEDRON** a 3D solid that is made up only of flat polygons and straight edges

**PRISM** a 3D solid with rectangular faces and two bases that are exactly the same

**NET** a flattened out 3D solid

**DREAM SCHOOL**

**WHAT MAKES OUR SCHOOL SPECIAL**

Solar Powered

Observatory

Makerspace

**3D SOLIDS**

**NETS OF SHAPES**

**STRONG STRUCTURES**

**RECTANGULAR PRISM**

**PYRAMID**

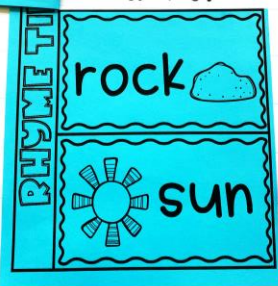
**CYLINDER**

**TRIANGULAR PRISM**

**DREAM SCHOOL**

**CUBE**

I have a scary  
cat dog,  
He cries when he  
sees a frog!



## Fact & Opinion

**FACT:** A true statement that can be proven.



- Sunflowers need sunlight and soil to grow.
- Mae Jemison was the first African American woman in space in 1992.

**OPINION:** What someone thinks they feel about something.



- I think sunflowers are the best flower that there is.
- Being an astronaut is not worth it, because...

### FACTS

### OPINIONS

\*Girls were pushed to learn about Home Economics. Some schools even made girls enter through different entrances than boys.

\*Gymnastics was very popular to teach as P.E.

\*School buses became really popular in 1930s.

\*I think it would be hard to learn with kids of every age.

\*I would love to write on slates with chalk.

\*I think it is unfair that children worked all day and went to school at night!

## Vocabulary in a Sentence

Directions: Fill in the blank to complete the phrase that makes sense.

Some examples of plants that **sprout** are \_\_\_\_\_

\_\_\_\_\_ is an example of a **system**.

## VOCABULARY

Use the four words below to label the pictures.

system    sprout    collide    perimeter



**system**



\_\_\_\_\_ of things  
\_\_\_\_\_ together

**sprout**



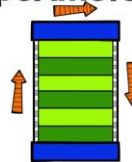
\_\_\_\_\_ to begin to grow

**collide**



\_\_\_\_\_ with force

**perimeter**



\_\_\_\_\_ the length of the outside of a shape

## Creating Rhythm

\*Two ways that authors can create rhythm:

- ① similar # of beats
- ② rhymes at the end



fish

Mom handed me a silver dish  
with a stinky, smelly fish!



champ

On the count of 3 let's hear  
you stamp,  
Because here comes your  
running champ!

## Rhyme and Rhythm

Rhyme is when the end of two or more words sound the same.



Rhythm is the strong pattern of beats in the music.



## IF I BUILT A SCHOOL

**MY OPINION**  
about **SCHOOLS**  
in the Future

In the future I would love to see schools where we focus on projects that excite us. Like group all the kids together who want to learn by taking care of animals and gardens.

9. Students will demonstrate their understanding of "Opinions" by writing what they would like to see about schools in the future. The first school bus can be copied on yellow paper or students can color it in. You may need to provide multiple lined buses for students.

E  
L  
A