

storybook  
**STEM**  
**BONAPARTE**  
**FALLS APART**

# BONE BUILDER

Bonaparte keeps falling apart!  
Put him back together by building symmetrical structures.

**YOU WILL NEED:**

- 12 Q-tips
- ½ can of playdough
- symmetry mat



## BONE BUILDER

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

An invisible line that mirrors identical sides when a shape is folded in half is called a \_\_\_\_\_ line of \_\_\_\_\_.

Draw 3 objects in the classroom that are SYMMETRICAL.

1	2	3
---	---	---



### SYMMETRY MAT



**CREATED BY BROOKE BROWN AND KATIE KING**

# K-2ND VERSION

**BONE BUILDER**  
Bonaparte keeps falling apart!  
Put him back together by building symmetrical structures.

**YOU WILL NEED:**

- 12 Q-tips
- 1/2 can of playdough
- symmetry mat

**BONE BUILDER**  
Name: \_\_\_\_\_

An invisible line that mirrors identical sides when a shape is folded in half is called a \_\_\_\_\_ line of \_\_\_\_\_.

Draw 3 objects in the classroom that are **SYMMETRICAL**.

**BONE BUILDER**  
Name: \_\_\_\_\_

**SKELETON**  
the internal framework of bones that supports the body of a living thing

**BONE**  
hard white tissue that makes up a skeleton and holds the body together

**JOINT**  
a point where two parts of the skeleton are joined

**SYMMETRY**  
having an invisible line that reflects or mirrors identical sides when a shape is folded in half

**LET'S EXPLORE BONES**

**HOW OUR BODIES MOVE**

**YOUR SUPER BONES**

**SYMMETRY MAT**

**BONE BUILDER**

What are some examples of bones?

Why are bones important?

Body parts that are symmetrical

Other symmetrical things

**BONE BUILDER**  
Bonaparte keeps falling apart!  
Put him back together by building structures with specific angles.

**YOU WILL NEED:**

- 12 Q-tips
- 1/2 can of playdough
- protractor (Optional)

**BONE BUILDER**  
Name: \_\_\_\_\_

An angle that is **LESS** than  $90^\circ$  is called an \_\_\_\_\_ angle.

An angle that is **EXACTLY**  $90^\circ$  is called an \_\_\_\_\_ angle.

An angle that is **MORE** than  $90^\circ$  is called an \_\_\_\_\_ angle.

angle. DRAW SOME EXAMPLES.

angle. DRAW SOME EXAMPLES.

angle. DRAW SOME EXAMPLES.

**LET'S EXPLORE BONES AND ANGLES!**

**HOW OUR BODIES MOVE**

**YOUR SUPER SKELETON**

**HOW TO MEASURE ANGLES**

**TYPES OF ANGLES**

**BONE BUILDER**

What do we know about bones?

Acute Angles in our body

Right Angles in our body

Obtuse Angles in our body

# 3RD-4TH VERSION



# ELL



## Idiom

Zachari planned to hit the books.  
A common phrase that does not mean...

3RD-4TH  
VERSION

## Halloween Idioms

7:27

muffled  
sensation  
retrieve  
mandible

## SPIN AND COLOR

Name: Carly

- Color your spinner 4 different colors. Spin.
- Color a box that applies to that word.
- Spin until all the boxes are filled.

jaw	quiet	It's made up of several bones.
All sea creatures are in water that...	get back	
your phone has a bad connection.	popular	You can catch your dog to do this.

## Spooky Idioms

which one?

in the dark

scared stiff  
When you don't feel like you can move, you are so scared!

hunts you

## CHARACTER Motivation

Motivation is what drives or pushes someone to do something. Characters are motivated by different things, but there are some common themes: **anger, money, love, acceptance**, and many more.

REALLY SHOOK HIM UP!

A RIB-HICKLING SENSATION

BONE UP ON OTHER IDEAS

He didn't need to worry about anything! Just grab fish!

## Character Motivation

Name: Ella

**Problem:** Bones falling off!

**SOLUTIONS:** Getting a dog (named Mandible) who will fetch all the bones for him!

Directions: Choose one word and write it in a sentence.  
Billy went to retrieve the bag he left behind.

## CHARACTER Motivation

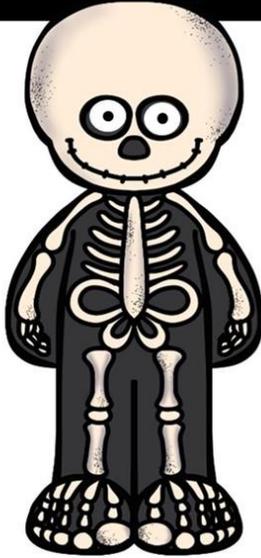
Character #1: amilia Cream → Acceptance Humiliation

Character #2: nbow Fish → Greed Friendship

Character #3: xander → Lonliness Acceptance Love

Other words: GREED, Love, Survival, Acceptance

# storybook STEM



## BONAPARTE FALLS APART

©BROOKE BROWN & KATIE KING

GOOGLE SLIDES  
& SEESAW  
FORMATS

Click and drag the bones to build a model of Bonaparte!  
Click and drag the labels to show acute, right, and obtuse angles on his body. You may also use a protractor to measure the angles in degrees.  
You may rotate the bones and make them bigger or smaller.

The digital activity interface shows a skeleton with various angles labeled: ACUTE, RIGHT, and OBTUSE. Below the skeleton is a table for recording the number of angles.

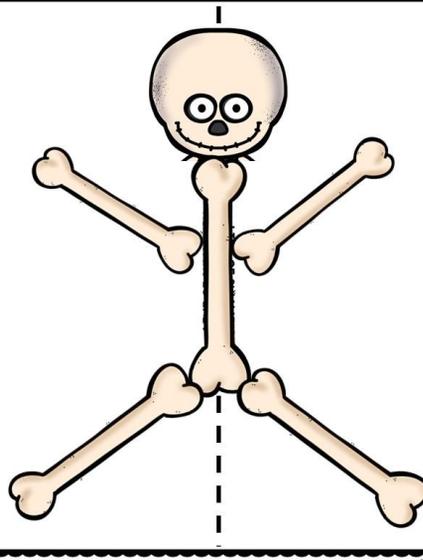
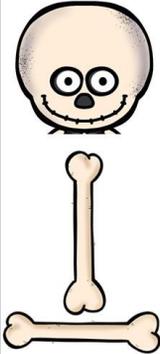
ACUTE	RIGHT	OBTUSE
2	1	4

NOW INCLUDES DIGITAL COMPONENTS!

CLICK & SHARE  
WITH STUDENTS  
IN GOOGLE  
SLIDES

Click and drag the bones to build a model of Bonaparte! Make sure that he is **SYMMETRICAL** and his body parts match up equally if he was folded in half.

You may rotate the bones and make them bigger or smaller.



© BROOKE BROWN & KATIE KING

INTERACTIVE VIDEOS AND TEMPLATES

CLICK & ASSIGN  
ACTIVITIES  
IN SEESAW

Activity Library

Community My Library

storybook **STEM**

 **BONAPARTE FALLS APART**

Brooke Brown  [Assign...](#)

Student Instructions

**BONAPARTE FALLS APART K-2nd (STEM CHALLENGE)**

BONAPARTE KEEPS FALLING APART!  
PUT HIM BACK TOGETHER BY BUILDING SYMMETRICAL STRUCTURES.

Tap [Get full response](#)

Follow the instructions on each slide:

- LET'S EXPLORE SYMMETRY!: Tap the links to visit websites and videos about polygons.
- THINK AND WRITE: Write at least one fact or idea in each box.
- WORDS TO KNOW: Tap and drag vocabulary words to match the definitions.
- SYMMETRY HUNT: Find objects that are symmetrical. Add photos or text for the objects you find.
- Tap and drag the bones to build symmetrical structures. You may rotate the bones in different directions and make them larger or smaller.

Tap 

Students will edit this template 

**BONE BU** 1 / 10

 Building "falling apart" Put him back together by building symmetrical structures.

# DIGITAL STEM

**SYMMETRICAL OBJECTS**

**GO ON A SYMMETRY HUNT!**  
Search for symmetrical objects around your home or classroom. Add photos or text for the things you find!



**THINK AND WRITE**

what are some examples of bones? why are bones important?

Click and drag the bones to build a model of Bonaparte! Make sure that he is SYMMETRICAL and his body parts match up evenly as he was folded in half.

You may rotate the bones and make them bigger or smaller.

**WORDS TO KNOW** Click and drag the words to match their definitions.

**SYMMETRY** **SKELETON** **JOINT** **BONE**

the internal framework of bones that supports the body of a living thing

hard white tissue that makes up a skeleton and holds it together

**LET'S EXPLORE BONES!**

HOW DO OUR BODIES MOVE?

YOUR SUPER SKELETON!

BONES

Intro to Symmetry

**BONE BUILDER**

Bonaparte keeps falling apart!

Put him back together by building symmetrical structures.



**BONE BUILDER**

Bonaparte keeps falling apart!

Put him back together by building structures with specific angles.



**THINK AND WRITE**

What we know About Bones acute Angles in our

**LET'S EXPLORE BONES & ANGLES**

HOW DO OUR BODIES MOVE?

YOUR SUPER SKELETON!

NUMBEROCK ANGLES SONG

**GO ON AN ANGLE HUNT!**  
Search for angles around your home or classroom. Add photos or text for the things you find!

**ACUTE** **RIGHT** **OBTUSE**

**WORDS TO KNOW** Click and drag the words to match their definitions.

**PROTRACTOR** **ACUTE ANGLE** **OBTUSE ANGLE** **RIGHT ANGLE**

an angle less than  $90^\circ$

a  $90^\circ$  angle, or perfect corner

an angle more than  $90^\circ$

a mathematical tool that is used to measure angles in degrees

**How Many Angles?**

ACUTE RIGHT OBTUSE



Click and drag the bones to build a model of Bonaparte!

Click and drag the bones to build a model of Bonaparte! Make sure that he is SYMMETRICAL and his body parts match up evenly as he was folded in half.

You may rotate the bones and make them bigger or smaller.

Click and drag the bones to build a model of Bonaparte!

Click and drag the labels to show acute, right, and obtuse angles on his body. You may also use a protractor to measure the angles in degrees.

You may rotate the bones and make them bigger or smaller.

Build an SYMMETRICAL STRUCTURE using 10 bones.

You may rotate the bones and make them bigger or smaller.

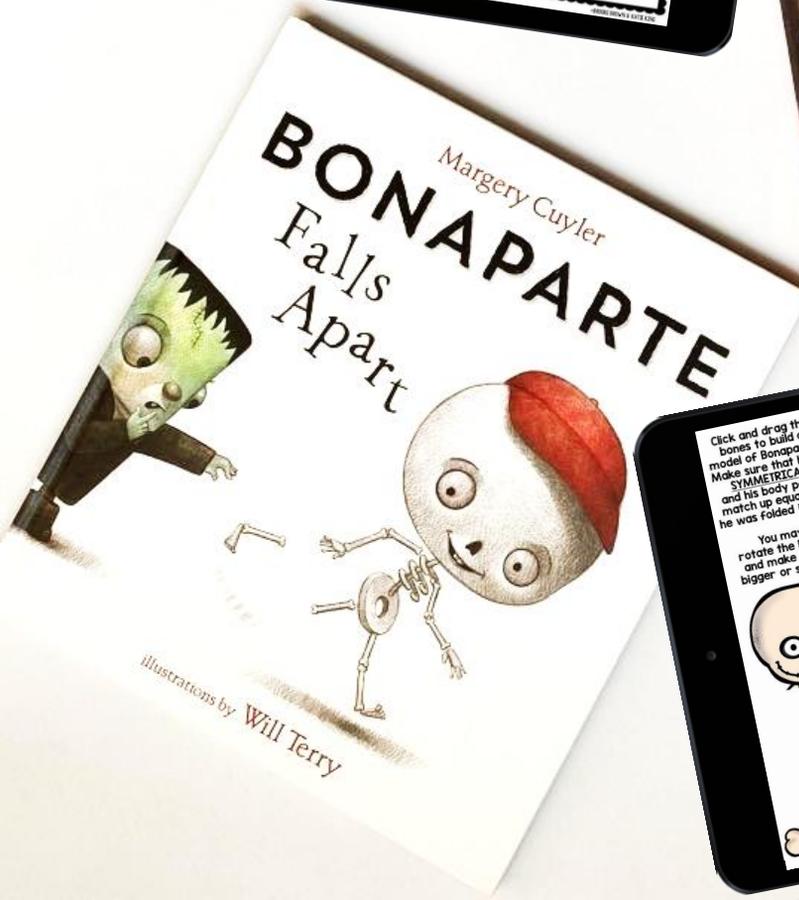
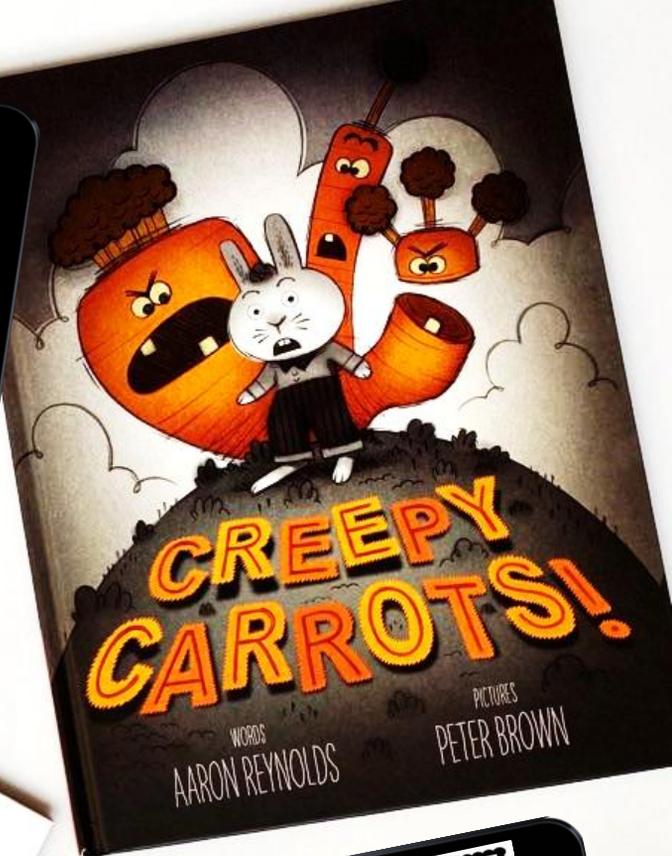
STATE OF MARYLAND  
DEPARTMENT OF EDUCATION

STATE OF MARYLAND  
DEPARTMENT OF EDUCATION

**SHAPE FENCES**  
**BUILD A TRIANGLE FENCE.**

How many sides and vertices (corners)?

3



Click and drag the bones to build a model of Bonaparte! Make sure that he is SYMMETRICAL and his body parts match up equally if he was folded in half.

You may rotate the bones and make them bigger or smaller.