



storybook

# STEM

KINDERGARTEN  
VOLUME 2

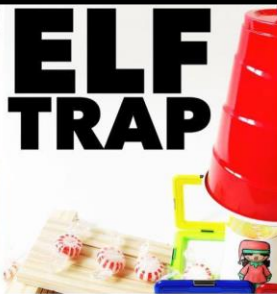
BROOKE BROWN & KATIE KING

# STEM challenges

SHADY SPOT FOR FERDINAND



ELF TRAP



STRAWBERRY HIDEOUT



CAMOUFLAGED

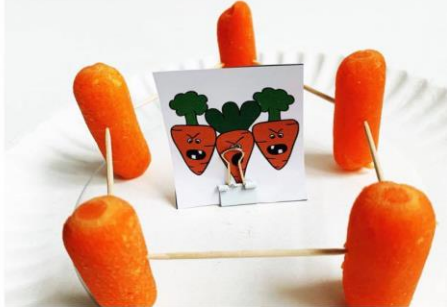
CRITTERS



TREE TOWER



SHAPE FENCES



CATCH THE RAIN





# STEM Components

## SHADY SPOT

Ferdinand needs to stay cool in the shade!

Create a shade structure that Ferdinand will fit underneath.

**YOU WILL NEED:**

- cardstock
- glue
- scissors
- string
- paper
- marker
- string
- paper
- marker

## STRAWBERRY HIDEOUT

The mouse needs to hide the red ripe strawberry from the big hungry bear!

Build a hideout that will keep the strawberry safe and completely hidden.

**YOU WILL NEED:**

- base ten blocks
- ruler

## ELF TRAP

The elf keeps getting into mischief!

Create a trap that will lure in the elf and keep him or her contained.

**YOU WILL NEED:**

- popstick sticks OR baby carrots and toothpicks
- Creepy Carrots cutout

## CATCH THE RAIN

Let's track the weather!

Create a rain gauge to measure how much rain falls each day.

**YOU WILL NEED:**

- plastic bottle with the top cut off
- permanent marker
- base ten rod
- rocks or pebbles

## TREE TOWER

The animals need a safe place to live!

Build the tallest possible redwood tree to hold as many animals as you can.

**YOU WILL NEED:**

- base ten blocks
- ruler

## CAMOUFLAGED CRITTERS

Your chameleon needs a habitat to hide in!

Can you create a paper collage habitat and camouflaged chameleon using only warm or cool colors?

**YOU WILL NEED:**

- paper plate
- paper chameleon
- glue
- popstick stick
- 2 pieces of construction paper (blue, green, purple OR red, yellow, orange)

## SHAPE FENCES

Jasper Rabbit needs to keep the Creepy Carrots from escaping!

Build shape fences to completely surround the Creepy Carrots.

**YOU WILL NEED:**

- popstick sticks OR baby carrots and toothpicks
- Creepy Carrots cutout

## LET'S EXPLORE ANIMAL ADAPTATIONS!

**CAMOUFLAGE** **ANIMAL TRICKS**

**CHAMELEONS** **WINTER COAT**

## LET'S EXPLORE WEATHER!

**THE WATER CYCLE** **CLOUDS**

**THUNDER AND LIGHTNING** **WEATHER WATCH**

## LET'S EXPLORE SUNLIGHT & SHADOWS!

**THE SUN** **SHADOWS**

**HOW ANIMALS KEEP COOL** **THE SUN SONG**

## LET'S EXPLORE TREES!

**WORLD'S TALLEST TREES** **TREE RINGS**

**IMPORTANCE OF TREES** **TREE SONGS**

## LET'S EXPLORE SHELTERS!

**HOUSES** **SHEET FORTS**

## LET'S EXPLORE MACHINES!

**RAMPS** **PULLEYS**

**LEVER** **MACHINES**

## CAMOUFLAGED CRITTERS

Color or draw your critter to match its environment.

**WARM COOL**

## CATCH THE RAIN

Track the weather.

**WARM COOL**

## SHADY SPOT

How the sun is helpful.

**WARM COOL**

## TREE TOWER

How tall is your tree?

**WARM COOL**

## STRAWBERRY HIDEOUT

How many animals are in your hideout?

**WARM COOL**

## SHAPE FENCES

How many sides does your shape have?

**WARM COOL**

## ELF TRAP

How does your trap work?

**WARM COOL**

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How many animals are in your hideout?

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How many sides does your shape have?

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## ELF TRAP

How does your trap work?

**WARM COOL**



# ELA Components

What's that sound?  
**bee**



What's that sound?  
**popcorn**



**BOOM**

**Character Thoughts**

How do the different characters think about the butterfly?

Exeter thought: "Dinner time!"



Exeter thought: "Yummy!"

Exeter thought: "I see a butterfly. Time to eat!"

Exeter thought: "No, I'm not hungry!"

Bugs thought: "Look at her wings!"

Bugs thought: "We helped! I make that!"

Bugs thought: "She's beautiful!"

Bugs thought: "She's flying!"

**Words to Describe Ferdinand**

1. gentle

**Character Thoughts**



Different characters can have different thoughts about the same thing!

**Descriptive Character**



What character inside and

**Sounds Words**  
(also called Onomatopoeia)

**BOOM BOING ZOOM ZAP CRACK POP**

**Learning from Illustrations**



**Adjective**  
words that describe



**Ending**



The ending of the book is where the **problem** is usually solved. Sometimes there is a **surprise!**

**Characters**



Ferdinand  
Strong

Ferdinand  
happy

**Sound WORDS**



**BAM!**

**Whack**



**POOB**

**Wahoo**



**Tick-Tock**

**BONG!**



**Who-Who-Who-Who**

**Wee-wee-wee-wee**

**Learning from**

**ILLUSTRATIONS**

1.



• More

An adjective that is a **Color**

• Strong

An adjective that shows **Size**

**Two**

2.



• All or tells very

• Speaks like this

3.



• M

• N

4.



• The Show it

• Mo and

**Predictions**

I predict **the sun** turns them **yellow**.

I predict **leaves** turns them **green**.

I predict **grapes** turns them **purple**.

I predict **night** turns them **black**.

**I CAN Predict**

↳ guess based on clues.

**Before**

- Look at cover
- Picture walk
- Think about what I know

**During**

- Paying attention to words and pictures... what next?
- Think about what I know

**After**

- Check predictions to see if you were right
- What did I miss?



# ELA Components

## Compare & Contrast

### How to Catch An Elf

- Elf and Santa
- Traps
- Just Catch!


### The Gingerbread Baby

- Cookie, Boy, & Townspeople
- Chasing
- Eat!

## Same


- People trying to get character
- Character gets away!

## The Tall Tree




I knew who lives in the tree  
Name: Suzie

draw:














## Hearing Rhymes



When books have a **rhyming pattern**, it helps us know what word will be next!

## Hearing RHYMES


## Answering Questions

### 1. Who is in the tree?

1. eagle → dinner

### 2. What are they doing in the tree?

2. owls → feeding babies



## Illustrations


Name: Kyle



This picture made me think... rainbows  
make everyone happy!  
You can't be mad!

## Connections


Name: Jacob



This book reminds me of when  
I made a mouse trap with cheese.

## Answering Questions

I can answer questions about a book.



Where? Who? When? Where? Why?

## How to Catch an Elf



★ They are both tricky  
★ They both run.

## The Gingerbread Baby




## What is the BIG Problem?




## What is the BIG Solution?



## How do people's feelings Change?




## Problem



What goes wrong in the story


## Solution



How the problem is fixed

## Illustration

The illustration makes the book.



Once upon a time...


The pictures give you **clues** to better understand the words.

## Connection Text to Self



It reminds me of something in

## Connection Text to Text



It reminds me of something in another book I read.

## Compare and Contrast



**compare=**  
Alike  
**contrast=**  
Different

