

storybook **STEM** ONE PLASTIC BAG

PRINTABLE
+
DIGITAL

PLASTIC POSSIBILITIES

Can you create something
useful out of plastic bags?

YOU MAY USE:

- clean plastic bags
- scissors
- tape



CREATED BY BROOKE BROWN & KATIE KING

storybook **STEM**



ONE PLASTIC BAG

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**GOOGLE SLIDES
& SEESAW
FORMATS**

WORDS TO KNOW

RECYCLE

REPURPOSE

REDUCE

ENTREPRENEUR

Click and drag the words
to match their definitions.



to convert
waste into
reusable
material



to adapt
something
for use in a
different
way



to make
smaller in
amount or
size



a person
who organizes
and operates
a business

INCLUDES DIGITAL COMPONENTS!

PLASTIC POSSIBILITIES

Can you create something useful out of plastic bags?



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- tape

—BROOKE BROWN & KATIE KING

CLICK & SHARE
WITH STUDENTS
IN GOOGLE
SLIDES

INTERACTIVE VIDEOS AND TEMPLATES

CLICK & ASSIGN
ACTIVITIES
IN SEESAW

storybook **STEM** Brooke Brown

Student Instructions

ONE PLASTIC BAG (STEM CHALLENGE)

CAN YOU CREATE SOMETHING USEFUL OUT OF CLEAN PLASTIC BAGS?

YOU MAY USE:

- clean plastic bags
- scissors
- tape

Tap [Add response](#)

Follow the instructions on each slide:

- T** PLASTIC POSSIBILITIES: Type your ideas in the boxes.
- E** XPLORE PLASTIC: Tap the links to watch videos about plastic.
- W** ORDS TO KNOW: Tap and drag vocabulary words to match the definitions.
- M** AKE A PLAN: Use shapes and drawing tools to draw a blueprint of plastic creation.
- T** PLASTIC POSSIBILITIES: Type your responses in the text boxes.
- I** nsert a picture of your plastic creation.
- M** ake a poster with ideas to reduce plastic use and plastic waste.

Students will edit this template

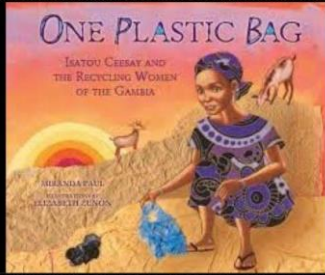
1/8

ONE PLASTIC BAG

Tap

DIGITAL STEM

WATCH & LISTEN ONE PLASTIC BAG



PLASTIC POSSIBILITIES

What did you create?

Add a picture of your finished creation!



How is your creation useful?

PLASTIC POSSIBILITIES

How can plastic be useful?

How can plastic be harmful?

How can we reduce plastic waste?

What can we create out of plastic bags?

WORDS TO KNOW

Click and drag the words to match their definitions.

RECYCLE

REPURPOSE

REDUCE

ENTREPRENEUR



to convert waste into reusable material



to adapt something for use in a different way



to make smaller in amount or size



a person who organizes and operates a business

PLASTIC POSSIBILITIES

Can you create something useful out of plastic bags?

YOU MAY USE:

- clean plastic bags
- scissors
- tape

PLASTIC POSSIBILITIES

How can we reduce our use of plastic and plastic waste? Make a poster to share your ideas!

storybook STEM



ONE PLASTIC BAG

MAKE A PLAN

Use drawing tools or shapes to draw a blueprint of your plastic bag creation.

EXPLORE

PLASTIC



DIGITAL ELA

VOCABULARY

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

tumbles

emerges

forage

pelt



emerges

forage



tumbles

pelt

Let's practice using these common phrases to make our writing more colorful.



THE SUN
PEEKING

GOOD
NEWS
TRAVELS
FAST



forage



to walk around looking for food

pelt



to throw repeatedly at someone

tumbles



fall down suddenly

emerges



to come out where people can see

TEACHER TALK!

Most books have a problem and solution in them. What part of the book do you usually see a solution? Why is this? What happens to characters as they try to solve problems?



Problem and SOLUTION

PROBLEM:
What goes wrong?

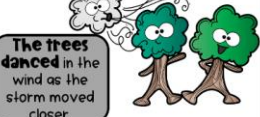


SOLUTION:
How is the problem fixed?



Personification

when **human** characteristics are given to objects and animals



Time flies when you are having fun.

Now Think!

Why does an author use this strategy? Why not just say, **she looks pretty**? Why **the camera loves her** instead?



Let's practice using these common phrases in sentences to make our writing more colorful.



ANGRY SKIES



FLOWERS BEGGING FOR RAIN

Let's practice using these common phrases in sentences to make our writing more colorful.

THE FIRE RAN WILD



THE TOAST JUMPED OUT

WHAT DOES IT REALLY MEAN?

Look at the examples of personification in One Plastic Bag. Highlight the human characteristic and then write about what the sentence means.

Something silky dances past her eyes, softening her anger.

Rain drums on the creaking aluminum roof.

Isatou hears a goat crying and hurries toward grandmother's house.

PROBLEM



Brady kicked Josiah

SOLUTIONS



PRINTABLE STEM CHALLENGE

PLASTIC POSSIBILITIES

Can you create something useful out of plastic bags?



YOU MAY NEED:

- clean plastic bags
- scissors
- tape

LET'S EXPLORE PLASTIC

THE PROBLEM WITH PLASTIC RECYCLING



PLASTIC BAG CREATIONS HOW TO CROCHET PLASTIC



PLASTIC POSSIBILITIES

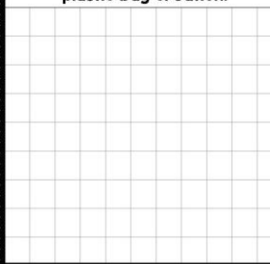
One Plastic Bag

NAME: _____

MY BLUEPRINT



Draw a picture of your plastic bag creation.



What did you create?

How is your creation useful?

PLASTIC POSSIBILITIES

RECYCLE



to convert waste into reusable material



to adapt something for use in a different way

REDUCE



to make smaller in amount or



a person who organizes and operates a business

PLASTIC POSSIBILITIES

One Plastic Bag

Possible Products

JUMP ROPE



KITE



PARACHUTE



JEWELRY



GE: PLASTIC POSSIBILITIES

Standard Alignment: K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a problem. 3-5-ETS1-1. Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints on materials, time, or cost. / Recycling, Repurposing, Environmental Protection

Challenge Description: Students will create something useful out of clean plastic bags. They may use any of the provided ideas (kite, jump rope, jewelry, parachute, etc.) or make their own invention!

Materials per student or pair of students: clean plastic bags (smaller projects)

PLASTIC POSSIBILITIES

How can plastic be harmful?

How can we reduce plastic waste?

What can we create out of plastic bags?

PRINTABLE ELA

Dig Deeper
Answer Questions for ONE PLASTIC BOY
In the very beginning
How can you tell that Isatou
has a different struggle than
you do?
Come close have a
look on "single use" plastic, why
do you think this is?
Grandmothers have goats? Do
you have any animals that
provide food for you?
Why did Isatou
change her mind about tracking
plastic was beautiful?
Why do you think
that Isatou "lovely noises" the
ugliness? Can you think of
something similar in your life?
Why is it such a big
problem what is happening
with the goats?
Why do people make
fun of Isatou and the other
women at first?
What do Isatou and

Years pass and Isatou grows into a woman. She
barely notices the ugliness growing around her...
until the ugliness finds its way to her.



YES IT REALLY MEANS?
Something silly
dances past her
eyes, softening her
anger.
Rain drums on the
creating aluminum
roof.

Personification

when human
characteristics are given to
objects and animals

The trees
danced in the
wind as the
storm moved
closer.



Time
flies when
you are
having fun.

PERSONIFICATION



GIVING HUMAN
CHARACTERISTICS
TO OBJECTS OR
ANIMALS.

Rain poured
down from the
angry skies.



Good news travels
fast so we heard
about the win immediately.



THE
TOAST
JUMPED
OUT

As the toast
jumped out of
the toaster, I snatched
it up!



THE
FIRE
RAN
WILD

We watched the
local news in silence
as the fire ran wild

PROBLEM & SOLUTION



Brandi is
always
late to
work.

Set an
alarm.
Make a
schedule.
Don't
procrastinate.



Smith got
really
muddy.

Take a
shower.
Get a
towel.
Call a friend.



Our car broke down.

Call a mechanic.
Hire a handy
man.
Call Triple A.



Emmie got
overwhelmed
at the
beach.

Get in
the shade.
Go inside.
Sit under a tree.

Shared VOCABULARY
Directions: Write and draw
forage | tumbles | emerges
tumbles | forage | emerges
emerge | pelt
emerge | pelt
tumble down a hill
Bell

Vocabulary in Action!
Directions: Fill in the blank to complete the phrase in a way that
makes sense.
It is not often we see a leader **emerge** so late in the race.
We were **pelted** by hail as we climbed the mountain.
On all the survival shows they have to **forage** for insects in the woods.
Did you see Nick **tumble** down the hill after he tripped over the rock?

Problem and SOLUTION
PROBLEM:
What goes wrong?
SOLUTION:
How is the problem fixed?

