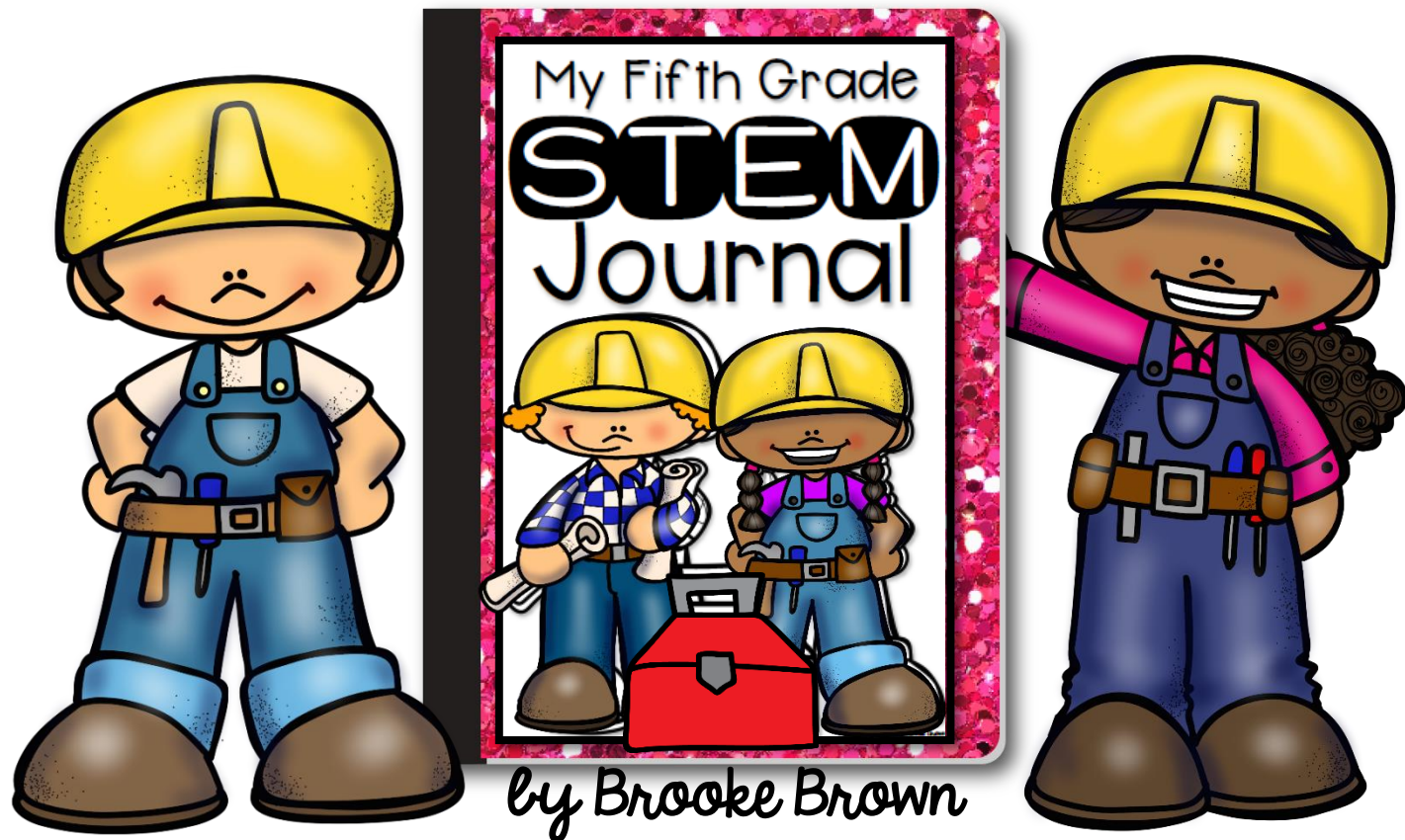
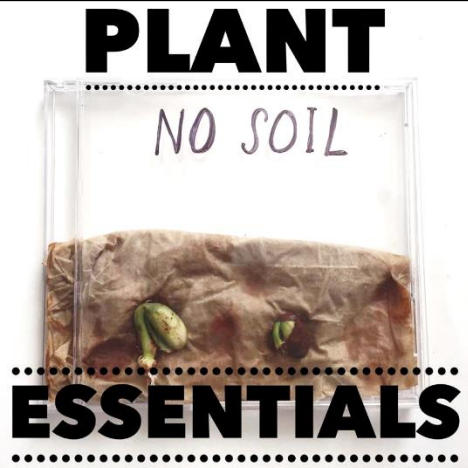
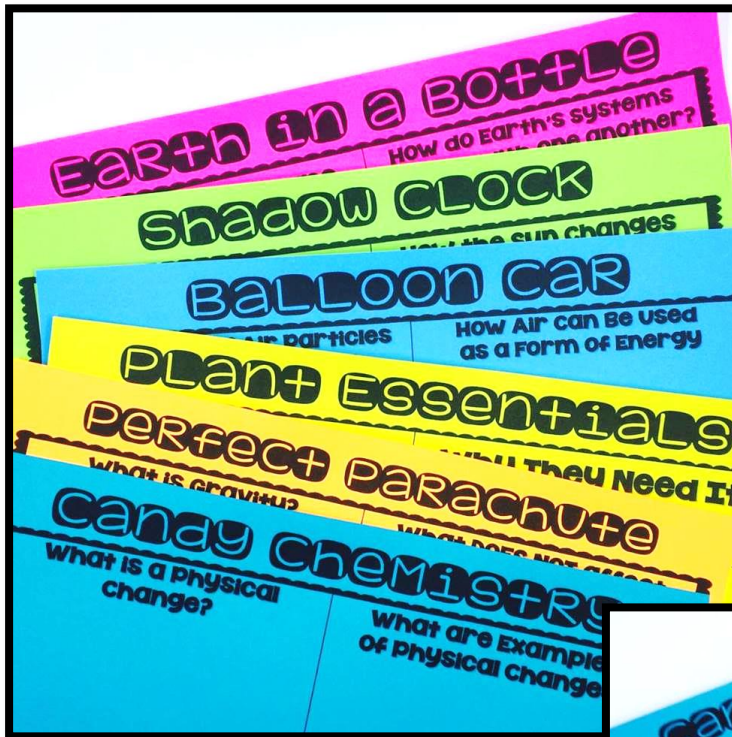


Fifth Grade STEM



6 NGSS Aligned Challenges for Science, Engineering, and Math designed specifically for 5th Graders!





Teacher charts



Student Booklets

My Fifth Grade STEM Journal



parachute tests

TEST	TIME	Did the basket land upright?
1		
2		
3		
4		

How did the design of your parachute Reduce gravitational pull?

Heavy and Light test
Design a parachute that allows you to test if an object is heavy or light. Drop two supplies from the same height at the same time and record your observations.

Supply 1	Supply 2	Which Supply landed first?

and do NOT feel gravitational pull.
Gravitational pull is affected by and will slow down the drop of the parachute.

My Parachute
Don't forget to label the parts!



Balloon car

Examples of Air particles that cannot be seen

How Air can be used as a form of energy

Balloon car

Name: _____

THE CHALLENGE

Can you create a car that is propelled by the air?

candy chemistry

What is a physical change?

What are examples of physical changes?

candy chemistry

Name: _____

THE CHALLENGE

Can you create physical and chemical changes with candy and baking soda?

perfect parachute

What is gravity?

What does NOT affect gravitational pull?

perfect parachute

Name: _____

THE CHALLENGE

Can you design a parachute that will drop a basket that will drop a certain amount of time?

shadow clock

How the Earth moves

How the sun changes

shadow clock

Name: _____

THE CHALLENGE

Can you create a shadow clock that tracks the time of day?

Plant Essentials

What plants need

Why they need it

Plant Essentials

Name: _____

THE CHALLENGE

Can you conduct a controlled experiment to determine which are most essential for a plant to grow?

Earth in a bottle

What are the systems of the Earth and what do they include?

How do Earth's systems interact with one another?

Earth in a bottle

Name: _____

THE CHALLENGE

Can you construct a model to represent Earth's systems?

Shadow observations

Time

How did the shadows change?

Why did the shadows change?

Why might it be useful to understand the changes in sunlight and shadows during the day?

My shadow clock

Shadow CLOCK

THE CHALLENGE

How does the Earth Move?

Shadow CLOCK

How the Earth Moves

How the sun changes

How shadows change

THE CHALLENGE

What is a Physical Change?

What are examples of physical changes?

Signs of a chemical change

What are examples of chemical changes?

INSTRUCTIONS

What is a chemical change?

What are examples of chemical changes?

Perfect

Heavy and Light Test

My parachute

parachute tests

THE CHALLENGE

What is gravity?

Examples of objects that fall slowly

What does affect gravitational pull?

How our parachutes Reduce gravitational pull

My Fifth Grade STEM Journal

My Fifth Grade STEM Journal

LESSON PLAN

Tests

Balloon car

THE CHALLENGE

Examples of Air particles That cannot be seen

Final observations

Plant Essentials

THE CHALLENGE

Plant observations

Earth in a Bottle

Earth in a Bottle

THE CHALLENGE

What are Earth's Systems?

LESSON PLAN

What plants Need

INSTRUCTIONS

What is most Important and why