

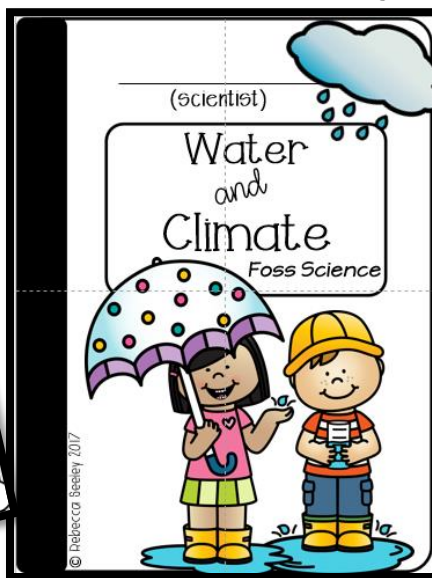
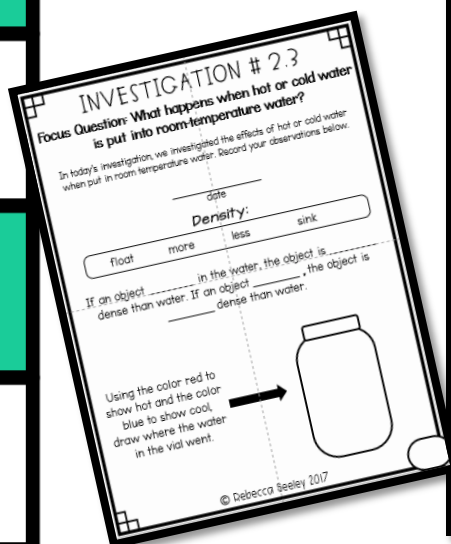
No Prep!

NGSS
aligned

Water and Climate

For **FOSS** Science Kits

A comprehensive student journal that follows all of the focus questions and investigations for the Water and Climate FOSS kit. Over 85 picture supported vocabulary cards included!



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Just a little note...

Thank you for purchasing this pack. Please take the time to email me (rebecca.seeley81@gmail.com) with any questions you may have, as well as **leave feedback** on your purchase!

This earns you TPT points you can use towards your next TPT purchase!

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Thanks so much and Happy Teaching!!

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Teacher Tip

Thanks for purchasing this pack! I have tried to create an easy and fun way to learn, using your FOSS Next Generation edition kit. The science notebook is to be used as you see fit.

Print and use all of the pages, or simply print what you need/what you have time for. (I know science time can be hard to come by these days!!) I have also included some extra pages to enhance your teaching and your students' learning. I have left the page numbers empty so you can use them in any order you'd like.

Check out the teacher tips throughout the pack for helpful hints and ideas. 😊

Teacher Tip

Science notebooking is a key component of FOSS science. On the next page you will find some simple guidelines to notebooking. I usually print this page out and laminate it. We go back and refer to it as we are notebooking to make sure we are covering all of the steps.

Science Notebooks

1. Date your entry
2. Think before you write
3. Use nice handwriting
4. Draw detailed pictures
5. Don't forget to label
6. Write in your table of contents
7. Share your findings



Did you know....?

Working in
groups is
really cool!
You get to
share ideas
and
observations!

**Just make
sure to give
everyone a
chance to
talk! Be fair
and kind to
everyone.**



Observe

When you observe,
you look **closely** at
something.

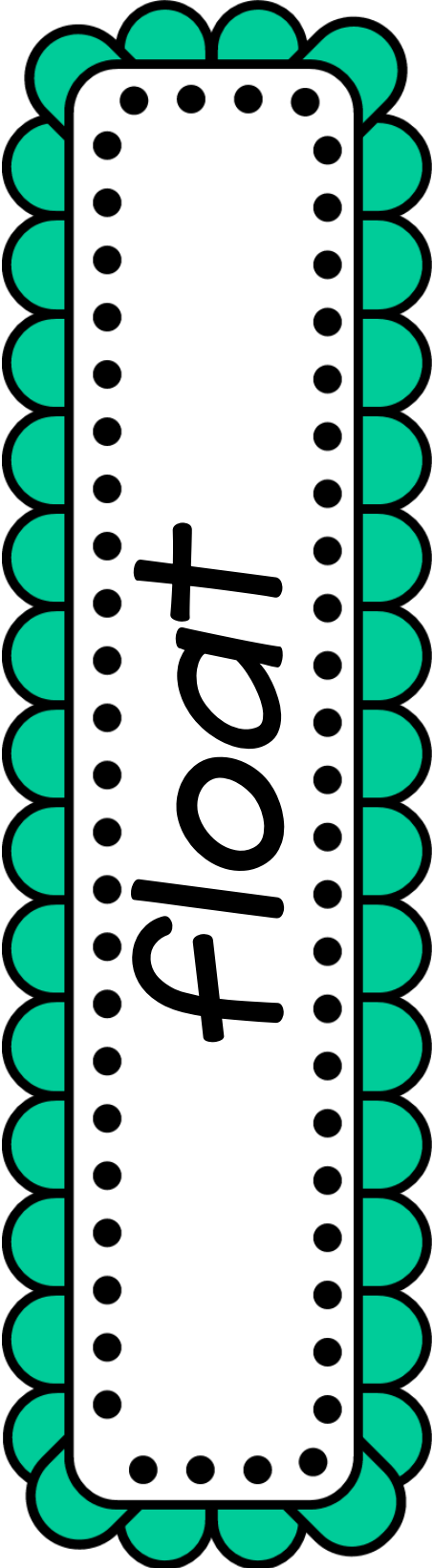
You can
watch how
things
change
over time!



Did you know....?

Water is
amazing!! We
drink it, we
play in it, it
keeps us
clean! But
water is so
much more!!
Let's learn
more about it!





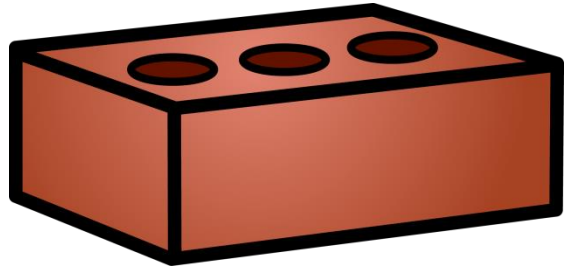
float



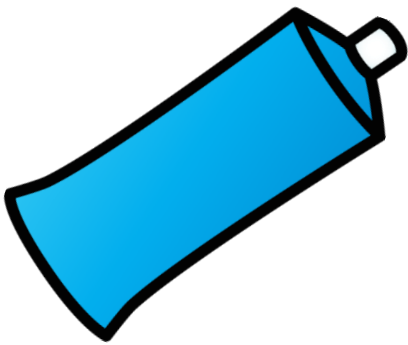
sink



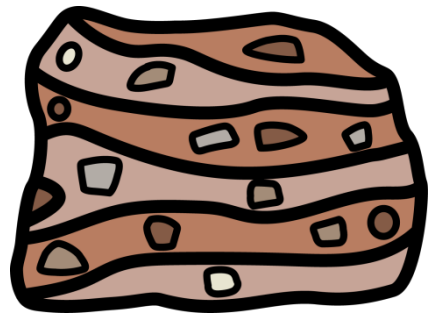
feather



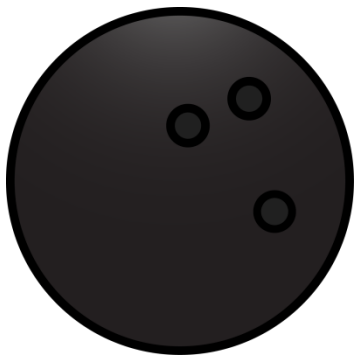
brick



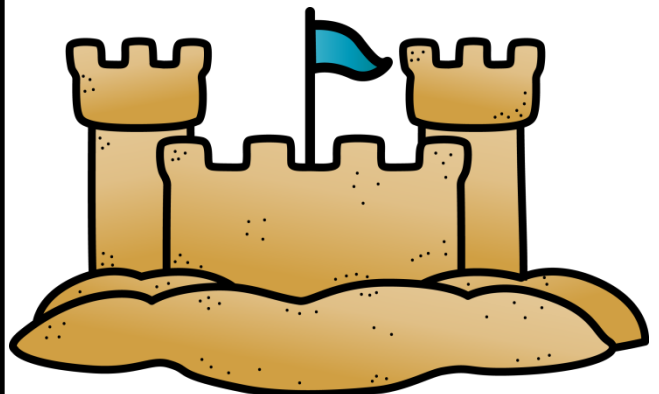
empty tube



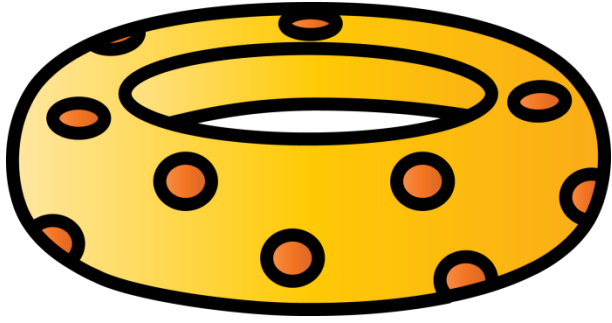
rock



bowling ball



sand



inner tube



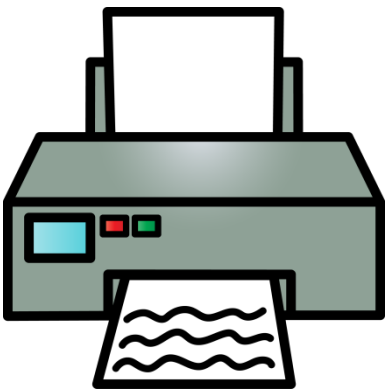
tree



soccer ball



car



printer



canoe

(scientist)

Water and Climate

Foss Science



(scientist)

Water and Climate

Foss Science



[illegible][illegible][illegible][illegible]

Scientists

can

have

are

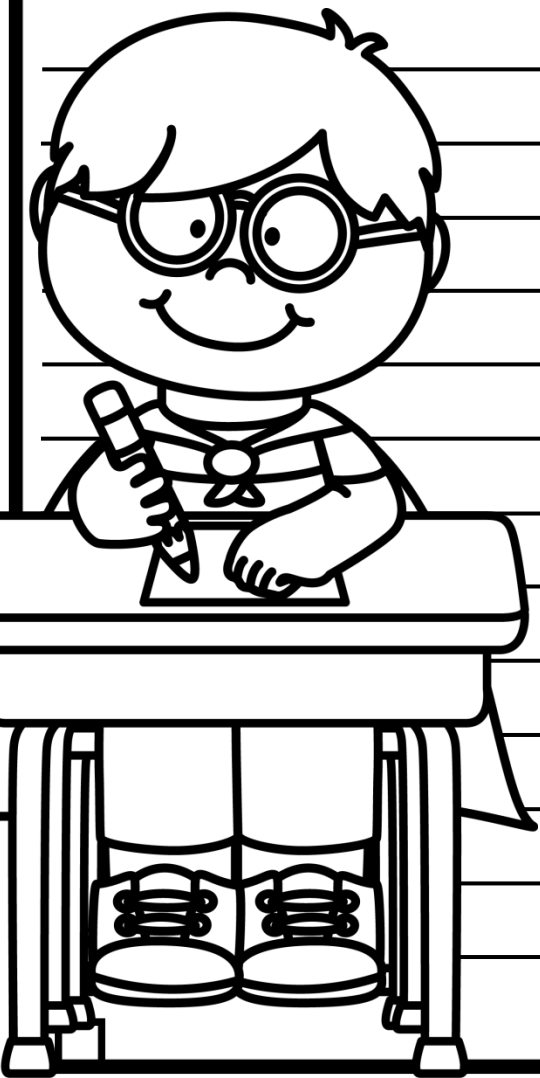
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Use your can/have/are chart to write 2 good sentences about scientists.

7 Minute

Quick Write

[What I already know about water and climate]



QUESTION, QUESTION...

Who has a question?

[Write 3 questions you have about this science unit.]

1

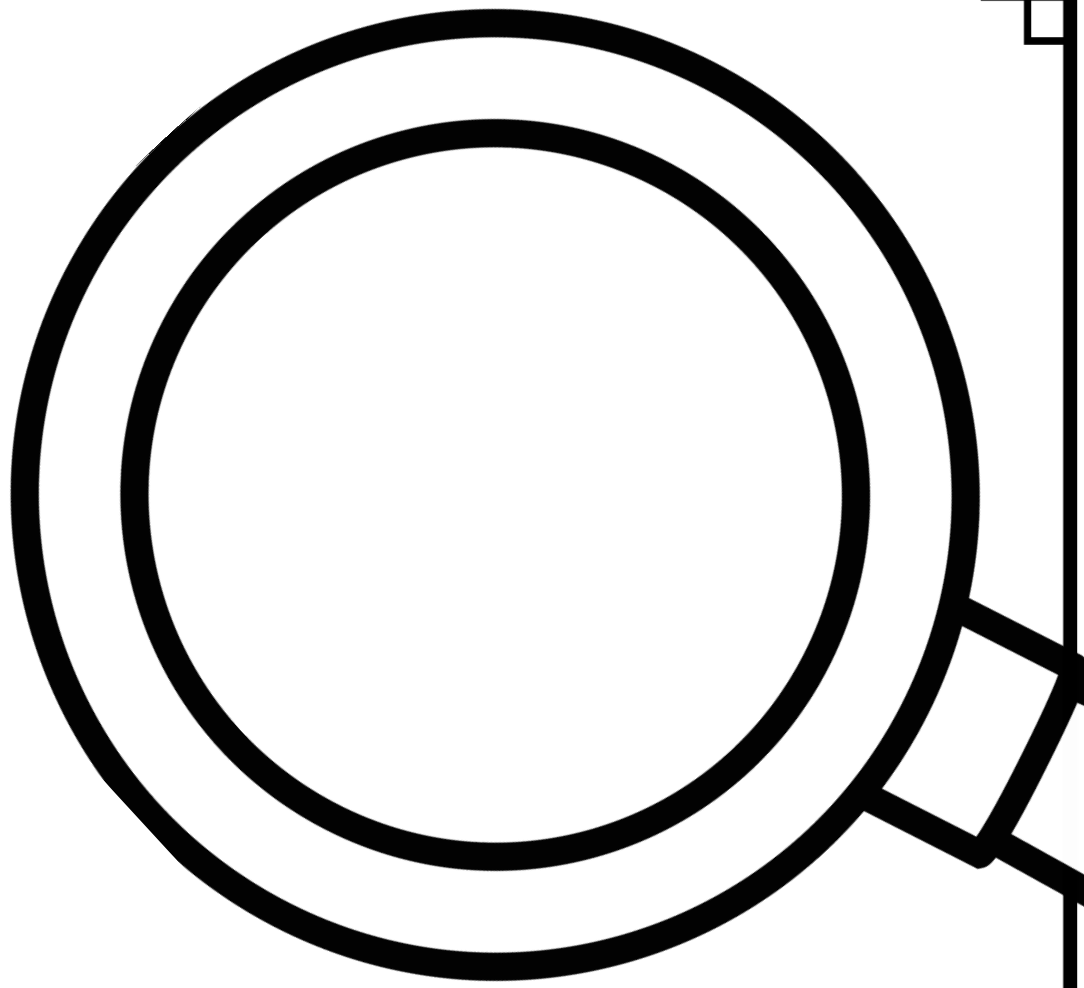
2

3

Teacher Tip

Many teachers have asked for additional room for students to write their thinking/learning. I created this page to place after each investigation page. This provides additional room for students to write their thoughts and observations down.

What did I learn in
this investigation?



Write, Draw, and Label

INVESTIGATION # 1.1

Focus Question: What happens when water falls on different surfaces?

In today's investigation we looked at what happens when water falls on 4 different surfaces. Describe and draw your findings. Label your drawings.

date

wax paper:

paper towel:

writing paper:

aluminum foil:

INVESTIGATION # 1.1

Reading: "A Report From the Blue Planet"

In today's reading we learned about Earth. After reading record your thoughts and ideas to each question in the response column.

_____ date

Question:	Response:
Why did the space visitor call Earth the blue planet?	
What are some of the properties of the water that the space visitor described?	
Could this imaginary story be true? Why/why not?	
What % of Earth is covered by water?	
What % is frozen? ocean?	
What % is usable liquid water?	

INVESTIGATION # 1.2

Focus Question: How does water move on a slope?

In today's investigation we looked at what happens when different sized water domes are put on a slope. Record your findings below.

date

1. Which dome do you think will get to the bottom first? Why?

2. Did all of the domes move?

3. What force caused the water domes to move down the slope?

4. What is the relationship between dome size and speed of travel?

INVESTIGATION # 1.2

Reading: "Surface Tension"

date

1. Why do you think water forms beads when it falls on a waterproof surface?

2. Have you ever watched water droplets during a rainstorm?

3. What happens when a glass gets filled above its rim?

4. Have you seen an insect walk across water? How could this happen?

5. What is surface tension?

INVESTIGATION # 1.2

Reading: "Which Way Does It Go?"

date

1. Which way does water always go?

2. From the tops of mountains, what is the general sequence of water flow to the ocean?

3. How do your investigations with the flow of water relate to what you have read?

4. What questions do you have about water and how it travels?

INVESTIGATION # 1.3

Focus Question: How much water can a dry sponge soak up?

In today's investigation we used a sponge, water, and scale to measure the amount of water that a sponge can soak up. Sequence the investigation by writing, drawing, and labeling. Write one thing you learned.

_____ date

First	Next	Last
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

One thing I learned in this investigation was...

INVESTIGATION # 1.3

Reading: "Opinion and Evidence"

In today's reading we learned more about the properties of sponges and looked at the opinion of 2 students. After reading record your thoughts and ideas to each question in the response column.

date

Question:	Response:
Teasha claimed that the natural sponges were better. What did she base that claim on?	
Why did Teasha and Kim repeat their experiment?	
Was Teasha's claim that natural sponges last longer based on opinion or evidence ?	
What is the difference between opinion and evidence?	

INVESTIGATION # 1.4

Focus Question: What happens outdoors when rain falls on natural materials?

In today's investigation we went outdoors to investigate what happens to materials when it rains. We used droppers to represent rain. Record your observations below.

_____ date

<i>outdoor material</i>	<i>absorb/repel water</i>	<i>observations</i>

What happens to you when it rains? What happens to animals? Are you waterproof or do you absorb the water?

INVESTIGATION # 1.4

Reading: "Water Everywhere"

_____ date

In today's reading we learned more about water. Write three things you learned, two ideas you want to remember, and one question that you still have about water.

3

Things that you learned

2

Ideas you want to remember

1

Question you still have

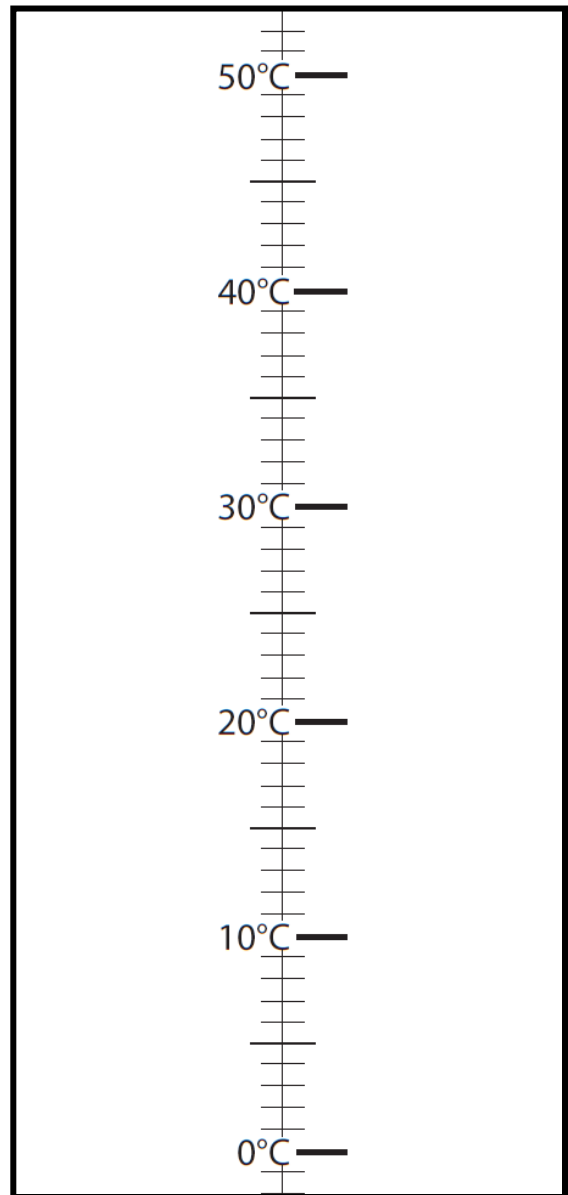
INVESTIGATION # 2.1

Focus Question: How can you measure temperature accurately?

In today's investigation we learned about how to use a thermometer to measure the temperature of water. Record your observations below.

_____ date

1. Measure the water in the 3 cups and record the temperature by writing "A", "B", and "C" beside the appropriate numbers on the left side of the temperature number line.
2. After measuring the hot and cold water, record their temperatures on the number line and label them "Hot" and "Cold".
3. Before mixing the hot and cold cups of water, write a "P" on the number line to predict the temperature you think it will be.



Temperature Number Line

INVESTIGATION # 2.1

Focus Question: How can you measure temperature accurately?

_____ date

We all did the same investigation to find the temperature of a mixture of hot and cold water. What were the things we all did the same?

The temperatures of the mixtures varied a little it from team-to-team. What are some of the reasons that results differed?

What could be done to increase the accuracy of your results?

INVESTIGATION # 2.1

Reading: "Vacation Aggravation"

In today's reading we learned more about metric measures. After reading record your thoughts and ideas to each question in the response column.

_____ date

Question:	Response:
If you went to Australia and someone told you it would be 15 degrees Celsius, what clothes would you pack? Why?	
If someone told you he or she drank 4 L of soda with lunch, would you believe them? Why?	
If you stood on a scale and the number 30 showed, what unit would you think the scale was measuring? Why?	
What is one question you still have about metric measure?	

INVESTIGATION # 2.2

Focus Question: What happens to water when it gets hot or cold?

In today's investigation we built a thermometer to observe water temperature. Record your observations below.

date

RECORD AND LABEL WATER LEVELS

Part 1:

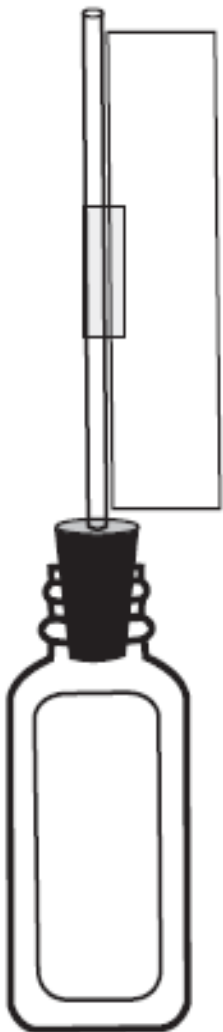
Where did you put the bottle system?

What observations did you make?

Part 2:

Where did you put the bottle system?

What observations did you make?



INVESTIGATION # 2.3

Focus Question: What happens when hot or cold water is put into room-temperature water?

In today's investigation we investigated the effects of hot or cold water when put in room temperature water. Record your observations below.

_____ date

Density:

float

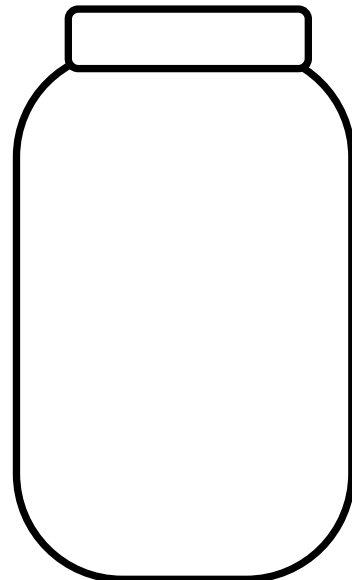
more

less

sink

If an object _____ in the water, the object is _____ dense than water. If an object _____, the object is _____ dense than water.

Using the color red to show hot and the color blue to show cool, draw where the water in the vial went.



INVESTIGATION # 2.3

Reading: "Water: Hot and Cold"

_____ date

1. Use the illustration in the article to explain why the rock will sink in water.

2. Look at the glass of water layered. Which is hot water? Which is the cold water? How do you know?

INVESTIGATION # 2.4

Focus Question: How does water change when it gets really cold?

In today's investigation, we looked at how water changes when it gets very cold. Record your observations below.

_____ date

1. What happened to the water in the vials and syringes when they were put into the freezer?

2. True or False? Read each statement and decide.

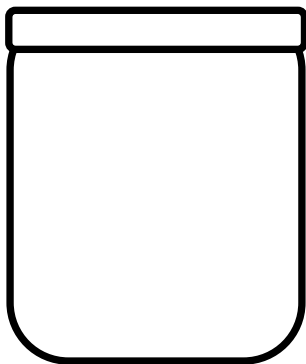
When water freezes, it expands. 😞 😊

Water takes up less space as ice than as liquid. 😞 😊

If you put a piece of ice in water, it will melt. 😞 😊

Solid, liquid, and gas are the 3 states of matter. 😞 😊

3. Draw, label, and describe what happened when you put a blue ice cube in water.



INVESTIGATION # 2.4

Reading: "Ice is Everywhere"

date

1. What is a glacier?

2. How much of the world's fresh water is stored in glaciers?

3. What is an iceberg?

4. Why is an iceberg dangerous to ships?

5. Why do some pipes burst in the winter? How can you prevent it?

INVESTIGATION # 2.5

Focus Question: Where should an animal go to stay warm or to stay cool?

In today's investigation we went outdoors to investigate what happens to an ice cube when placed in the sun, in the shade, and underground. Record your observations below.

date

<i>Animal (bag)</i>	<i>location & conditions</i>	<i>observations</i>		
		<i>10 min</i>	<i>20 min</i>	<i>30 min</i>
<i>A</i>				
<i>B</i>				
<i>C</i>				

Where should an animal go to stay warm or to stay cool?

INVESTIGATION # 3.1

Focus Question: What does the weather forecast tell us?

In today's investigation we went outdoors to investigate the weather. Record and date your observations below in the Weather Data Chart. You will be revisiting this chart throughout the next 5-7 days to see if you can find any weather patterns. Make sure to date each entry.

Weather Data Chart

Date	Time	Condition	Temp	Wind Direction	Precipitation

INVESTIGATION # 3.1

Focus Question: What does the weather forecast tell us?

_____ date

1. What does the weather forecast tell us?

2. What is the difference between observing the temperature and actually measuring it?

3. What is the difference between observing precipitation and measuring it?

4. How might we explain any difference between our data and the forecast?

INVESTIGATION # 3.1

Reading: "Studying Weather"

date

1. Who are meteorologists and what do they do?

2. How do we measure air temperature? wind direction? precipitation?

3. What do meteorologists use weather balloons for?

4. Why is it important for meteorologists to be able to forecast the weather?

INVESTIGATION # 3.2

Focus Question: What happens to wet paper towels overnight?

In today's investigation we set up an investigation to see how paper towels dry themselves. We then made predictions about what we thought would happen. Record your predictions below.

_____ date

<i>prediction:</i>	<i>observation:</i>

What is evaporation? _____

How did the lid change the outcome? _____

INVESTIGATION # 3.2

Reading: "Drying Up"

_____ date

1. What happens when you put an object in a sealed container, explain why?

2. What happens when you put a wet object on a clothes line for a few hours, explain why?

3. Can we see water vapor in the air?

INVESTIGATION # 3.3

Focus Question: How does surface area affect evaporation?

_____ date

Surface-Area Table

	Water Starting Volume	Water Ending Volume	Evaporated Water Volume	Ranking 1-most evaporated
Graduated Cylinder				
Beaker				
Dome Lid				
Flat Lid				

What is surface area? _____

How does surface area affect evaporation? Explain.

INVESTIGATION # 3.4

Focus Question: What else affects how fast water evaporates?

_____ date

Part 1: Evaporation Data

Letter of Location	Amount of Evaporation	Average Temperature
A		
B		
C		
D		

Part 2: Evaporation Comparison

order	Amount of Evaporation	Letter of Location	Average Temperature	Letter of Location
1	Most Evaporation		Highest Temperature	
2				
3				
4	Least Evaporation		Lowest Temperature	

INVESTIGATION # 3.4

Focus Question: What else affects how fast water evaporates?

date

Thoughts and Observations

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

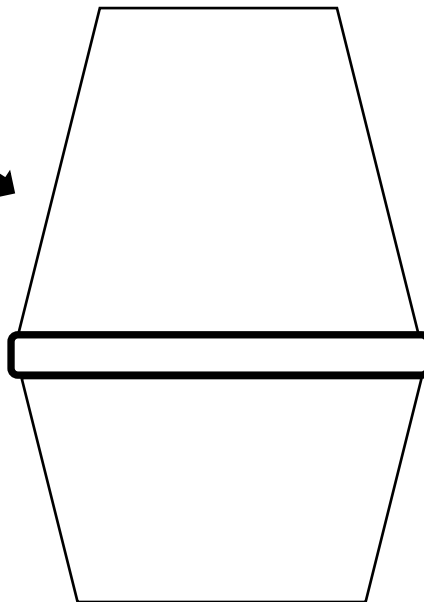
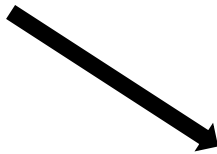
INVESTIGATION # 3.5

Focus Question: What causes moisture to form on the side of a cup?

In today's investigation we investigated 2 cups of different temperature water to see how moisture forms. Record your observations below.

date

Draw and label.



Why did condensation form on the inside surface of the chamber?

Where did the water that condensed on the sides of the cup come from?

INVESTIGATION # 3.5

Reading: "The Water Cycle"

date

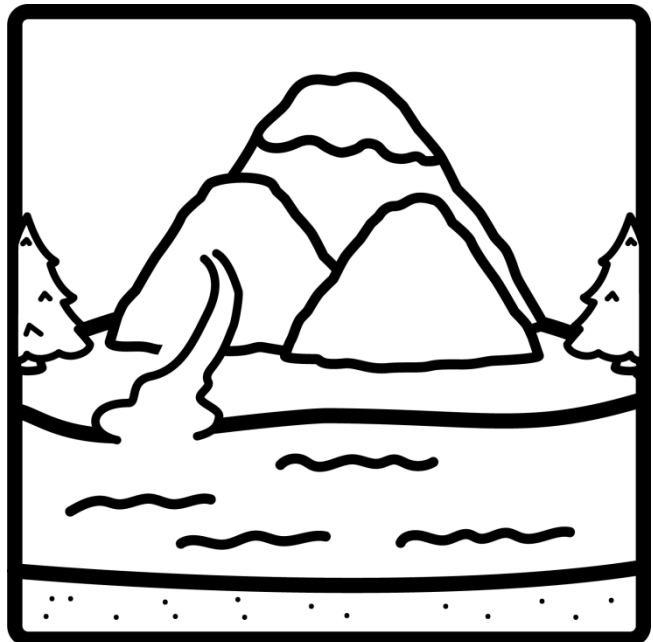
1. What three things affect how fast water evaporates?

2. What three things are needed for condensation to occur?

3. Draw arrows and label on the picture what you know about the water cycle.

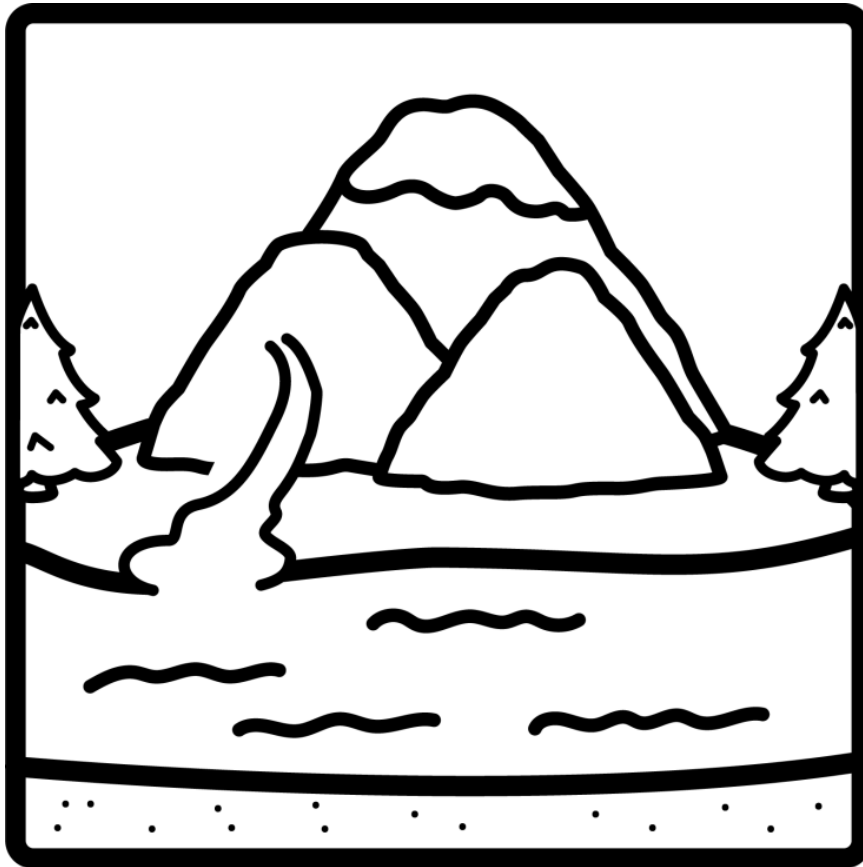
Word Bank:

evaporation
precipitation
condensation



THE WATER CYCLE

Write and draw what you know about the water cycle. Use arrows to show the cycle. Use the words condensation, evaporation, and precipitation.



In words, describe the water cycle.

Teacher Tip

For this investigation you will have to go onto the Weather Underground website at www.weatherunderground.com and print off a monthly calendar of the previous year for your area. You need to print off January, April, July, and October in order to represent each season. The calendars will be used to answer the focus question in 4.1 . The first 4.1 journal page is for students to write down their observations and learnings from investigating the calendars. The second is left blank so they can glue in their graph, using notebook page 18. You can guide them in making a graph for the data, or have them do it independently.

[illegible]

Focus Question: What are the typical weather conditions in our region?

In today's investigation we looked at weather maps from our area. We discussed ways to organize the data so it can be easily interpreted. In the T-chart below, organize your data.

A large black crosshair graphic centered on the page, consisting of a horizontal line and a vertical line intersecting at the center.

INVESTIGATION # 4.1

Focus Question: What are the typical weather conditions in our region?

Below you will glue your weather data graph.

INVESTIGATION # 4.2

Focus Question: How do we describe different climates?

In today's investigation we learned about different climates around the world. We came up with ways to describe each climate. Show what you learned below.

date

1. What is a climate? How would you describe the climate where you live?

2. How might climate information be useful to you when going on a trip?

3. How would you describe a tropical climate?

4. What kind of climate would you like to live in? Why?

INVESTIGATION # 4.2

Reading: "Climate Regions"

In today's reading we learned more about climates around the world.
Below, draw and write one fact about the different climates.

_____ date

Climate Regions

Tropical Wet Zone

Arctic Zone

Dry Subtropical Zone

Hot Arid Zone

INVESTIGATION # 4.3

Focus Question: How do people deal with natural hazards, such as floods?

In today's investigation we learned about floods and other natural hazards. Answer the questions below to show your learning.

date

Naburn Video:

1. What factors contributed to the flood in the village of Naburn?

2. What did the family do after the flood to be better prepared for the next time?

Bangladesh Video:

3. What is a monsoon?

4. What is a sluice gate and what does it do?

INVESTIGATION # 4.3

Reading: "Wetlands for Flood Control"

In today's reading we learned more about natural hazards and the effects they can have in a town or city. Answer the questions below to show what you have learned.

date

Question:	Response:
Have there been floods in your community? What caused them? What was the effect of the flood?	
Is there a floodplain in your community? How is it used?	
Is there a wetland in your community? How does that wetland help reduce the effects of floods?	
Make a claim about the merit of the wetland design solution to flood control and support it with examples.	

INVESTIGATION # 5.1

Focus Question: What happens when water is mixed with earth materials?

In today's investigation we learned how water affects earth materials.
Record your observations below.

_____ date

Material	mass (g)	water added	water drained	water held
<i>soil</i>				
<i>gravel</i>				

Which earth material soaked up more water?

How do you know? What is your evidence?

What fills the space in the materials when they are dry? wet?

INVESTIGATION # 5.1

Reading: Water: "A Vital Resource"

_____ date

In today's reading we learned more about water. Write three things you learned, two ideas you want to remember, and one question that you still have about water.

3

Things that you learned

2

Ideas you want to remember

1

Question you still have

INVESTIGATION # 5.1

Reading: "Natural Resources"

date

1. Select one nonrenewable resource and explain why it is considered nonrenewable. What can people do to conserve it?

2. Select one renewable resource and explain why it is considered renewable. What can people do to conserve it?

3. Explain why it is so important to conserve all natural resources.?

INVESTIGATION # 5.2

Focus Question: Do soils in the schoolyard drain water at the same rate?

In today's investigation we learned about drainage. Record your observations and findings below.

_____ date

What is drainage?

<i>Location</i>	<i>Soil Description</i>	<i>Drain Time</i>

Do all soils drain water at the same rate?

INVESTIGATION # 5.2

Reading: "Ellen Swallow Richards: An Early Ecologist"

In today's reading we learned about an ecologist named Ellen Swallow Richards. As you read, write what the article makes you think about in the "What I think" column.

Then write a brief summary of the article in the "What the text says" column.

date

What I think:	What the text says:

Questions to guide your thinking:

1. What is an ecologist?
2. Why did the biography call Richards an "early ecologist"?
3. How did she study the water supply in the state of Massachusetts?

INVESTIGATION # 5.3

Focus Question: What is needed to make a waterwheel system function well?

In today's investigation we learned how water has the power to do work.
We created waterwheels to show the power of water.

date

My Waterwheel

How did you create your waterwheel? What changes did you need to make? Draw and label your waterwheel above.

INVESTIGATION # 5.3

Reading: "Using the Energy of Water"

In today's reading we learned about how we use water to create useable energy. As you read fill out the chart below. You will write thing that you have learned in the first column and then questions you may still have under the "What I wonder" column. Use the questions to help guide your thinking.

date

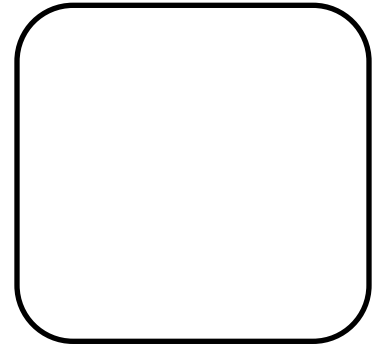
What I learned:	What I wonder:

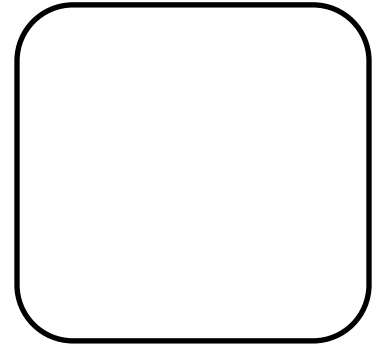
Questions to guide your thinking:

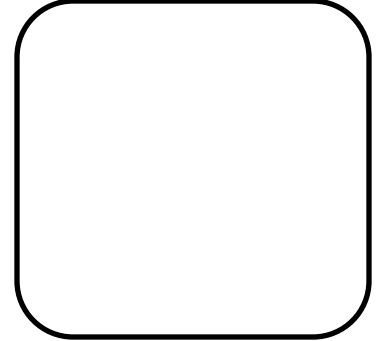
1. What are some of the effects of hurricanes on land?
2. What is a modern kind of waterwheel, and what does it do?
3. What have you learned about engineering and engineers?

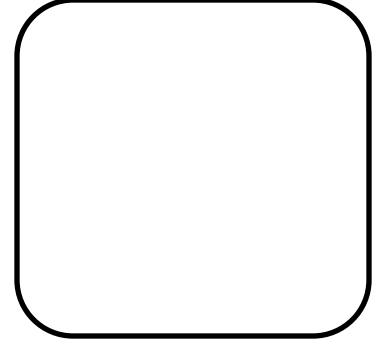
Glossary

Write the word, define, and draw a picture to go with it.









Teacher Tip

You could have kids put each vocabulary word into their glossary as you put them up on your word wall!! Kids love to add a detailed picture as well!

Use the following black checkered pages to enlarge and turn into your word wall for each investigation.

Just print the vocab cards at a slightly reduced size so more will fit on the page

vocabulary:

Investigation 1

absorb
bead
bead up
data
direction
dome
earth material
evidence
gravity
interact
move
natural material
observation

opinion
relationship
repel
slope
surface
water proof

Investigation 2

bulb
cold
contract
degrees Celsius
expand
float
freeze
hot
less dense
liquid
mass

melt
more dense
sink
solid
state
temperature
thermometer
volume

Investigation 4

blizzard
climate
climatologist
drought
embankment
flood
floodplain
hailstorm
hurricane
lightning
monsoon
natural hazard
season
sluice gate
tornado
typical
wetland

Investigation 3

compass
condensation
evaporation
forecast
gas
meteorologist
meteorology
precipitation
rain gauge
surface area
water cycle
water vapor
weather
wind vane

Investigation 5

blade
constraint
criteria
criterion
drainage
energy
gravel
humus
load
natural resource
nonrenewable resource
renewable resource
retain
shaft
soil
system
water retention
waterwheel

Investigation 1:

Water Observations

Investigation 2:

Hot Water, Cold Water

Investigation 3:

Weather and Water

Investigation 4:

Seasons and Climate

Investigation 5:

Waterworks

absorb

when a liquid soaks
into a material



bead

a dome-shaped
drop of water



bead up

when water drops, or
beads, sit on top of a
waterproof surface



Investigation 1 Words

direction

the course or line along which something move, faces, lies or points



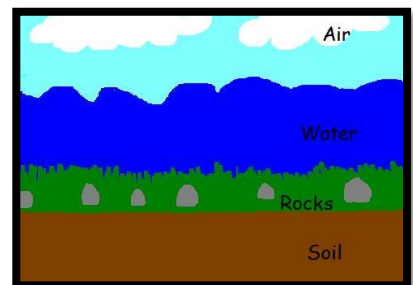
dome

the shape a drop of water takes when it is on a flat surface



Earth material

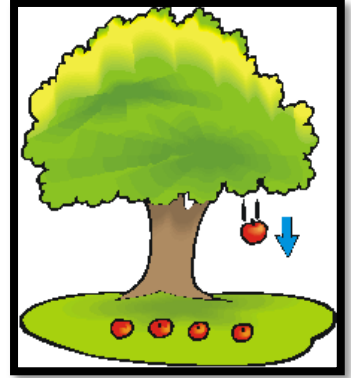
any substance that makes up or comes from the Earth



Investigation 1 Words

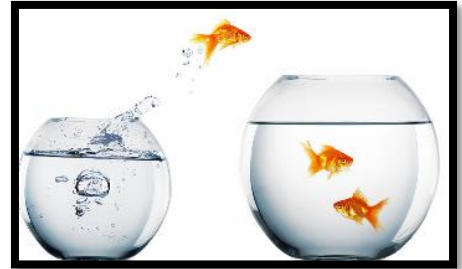
gravity

the natural force that
pulls objects toward
each other



move

to change place or
direction; to put in
motion



natural material

any material that makes
up or comes from the
earth; earth material



Investigation 1 Words

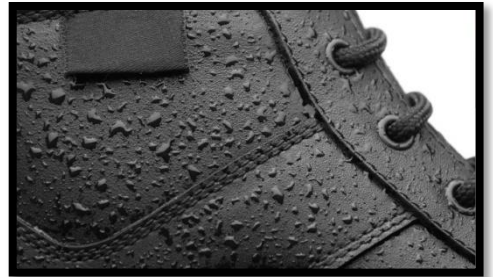
relationship

a connection or
association



repel

when a liquid does
not soak into a
material



slope

a slanted or tilted
surface



Investigation 1 Words

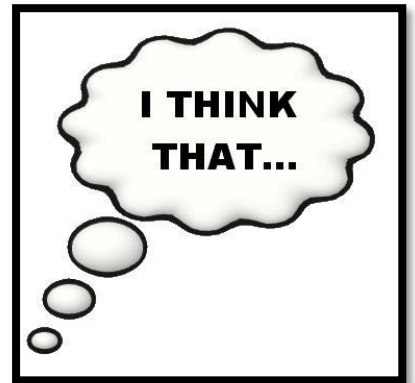
surface

the outside of an
object



opinion

a claim based on belief,
not on scientific data
or observations



water proof

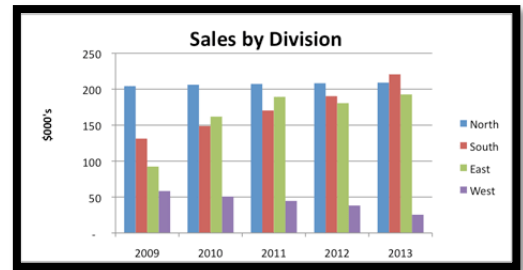
a nonporous or
nonabsorbent surface on
which water will bead up
and flow off



Investigation 1 Words

data

information
collected during
an investigation



evidence

data used to
support claims



interact

to have an effect
on one another



Investigation 1 Words

observation

information
obtained through
your senses



hot

having a high
temperature, hot
water is less dense



Investigation 1/2 Words

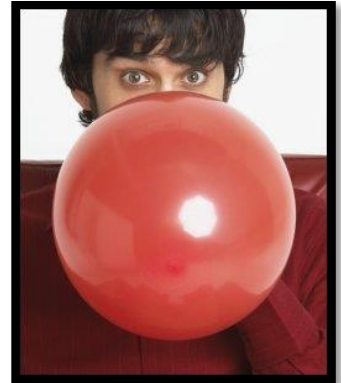
contract

to get smaller; to
take up less space



expand

to get bigger; to
take up more space



float

to stay on the surface of
water as a result of being
less dense than water



Investigation 2 Words

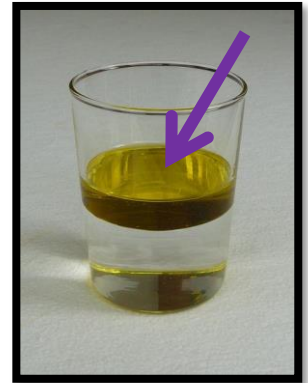
freeze

to change from a liquid to a solid as a result of cooling



less dense

when an object floats in water, it is less dense than the water



liquid

a state of matter with no definite shape but with a definite volume



Investigation 2 Words

mass

the amount of
material in
something



melt

to change from a solid
to a liquid state as a
result of warming



more dense

when an object has more
mass for its size than
another object



Investigation 2 Words

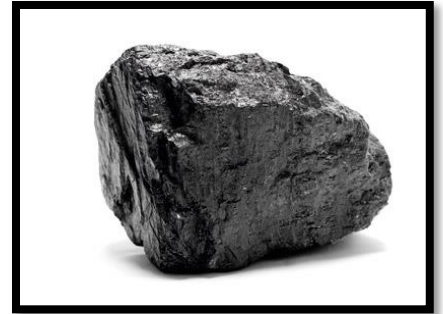
sink

to go under water as a result of being denser than the water



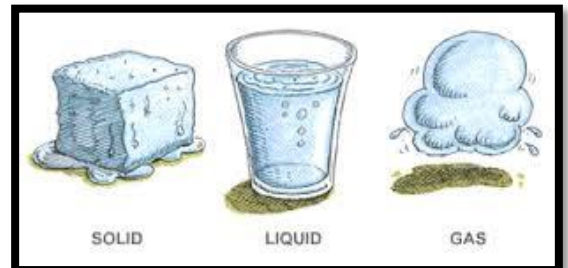
solid

a state of matter that has a definite shape and volume



state

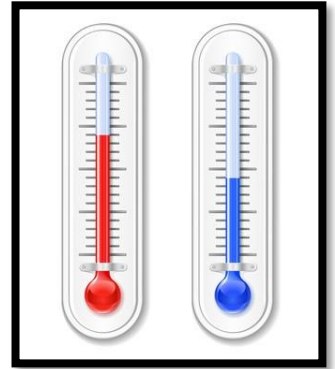
a kind or form of matter, three common states of matter are solid, liquid, and gas



Investigation 2 Words

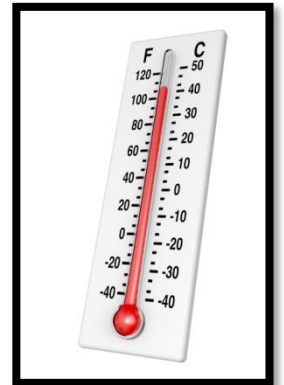
temperature

a description of
how hot or cold
something is



thermometer

a tool used to
measure
temperature



volume

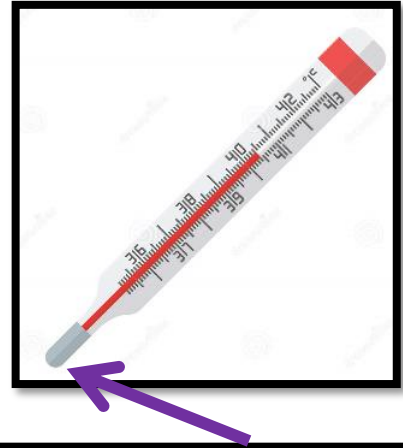
three-dimensional
space



Investigation 2 Words

bulb

the round end of
a thermometer



cold

having a low
temperature, cold
water is more dense



degrees Celsius

the basic unit of
temperature in the
metric system

°C

Investigation 2 Words

condensation

the process by which
water vapor changes
into liquid water,
usually on a surface



evaporation

the process by which
liquid water changes
into water vapor



gas

a state of matter with
no definite shape or
volume; usually invisible



Investigation 3 Words

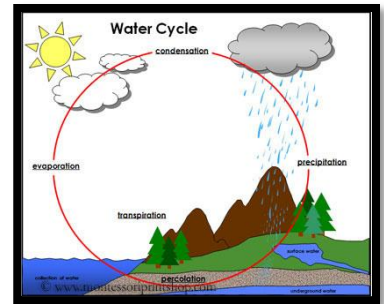
surface area

the area of liquid
exposed to or
touching the air



water cycle

the repeating sequence of
condensation and evaporation
of water on Earth, causing
clouds and rain



water vapor

the gaseous state
of water



Investigation 3 Words

compass

a magnetic needle in a case
that indicates direction;
compass needles on Earth
point north



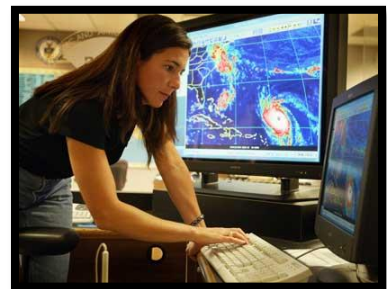
forecast

to predict future
events or condition,
such as weather



meteorologist

a scientist who
studies the
weather



Investigation 3 Words

precipitation

rain, snow, sleet,
or hail that falls to
the ground



rain gauge

an instrument that
measures how much rain
has fallen in a given
amount of time



weather

the condition of
the air around us



Investigation 3 Words

meteorology

the study of
weather



wind vane

a weather instrument
that measures wind
direction



Investigation 3 Words

blizzard

a severe storm with low temperatures, strong winds, and large quantities of snow



climate

the average or typical weather condition in a region of the world



climatologist

scientists who study climate



Investigation 4 Words

drought

a less-than normal
amount of rain or snow
over a period of time



embankment

a raised bank or wall
that is built to carry a
roadway or hold back
water



flood

a large amount of
water flowing over
land that is usually dry



Investigation 4 Words

flood plain

the flat, low land
area next to a river
that may flood



hailstorm

precipitation in the
form of small balls or
pellets of ice



hurricane

a severe tropical
storm that produces
high winds



Investigation 4 Words

lightning

the flashes of light
that are produced in
the sky during a storm



monsoon

a wind system in
Southeast Asia that
brings heavy rain during
certain seasons



natural hazard

a threat of a naturally
occurring event that will
have a negative effect on
people or the environment



Investigation 4 Words

season

a time of year that
brings predictable
weather conditions



sluice gate

a wood or metal barrier sliding in
grooves that are set in the sides
of a waterway; sluice gates can
control water levels and flow
rates in rivers and canals



tornado

a rapidly rotating column
of air that extends from a
thunderstorm to the
ground



Investigation 4 Words

typical

the average weather
that is expected in a
given area



wetland

an area of land close
to a large body of
water



Investigation 4 Words

blade

the part of a
waterwheel that the
water pushes as it
moves downward



drainage

the movement of
water through soil



gravel

rocks that are smaller
than pebbles and drain
water quickly



Investigation 5 Words

retain

to hold or
continue to hold



shaft

the part of a
waterwheel that the
blades turn



soil

a mixture of humus,
sand, silt, clay,
gravel, or pebbles



Investigation 5 Words

natural resource

a material such as soil or water that comes from the natural environment



nonrenewable resource

a natural resource that cannot be replaced if it is used up



renewable resource

a natural resource that can replace or replenish itself naturally over time



Investigation 5 Words

water retention

the ability to soak up and hold water



waterwheel

a wheel turned by the force of moving water



constraint

the limitations that must be taken into account when working in the classroom



Investigation 5 Words

criteria

a need or a
requirement



criterion

a plural version of
criteria



energy

the ability to make things
happen; energy can take a
number of forms such as
heat and light



Investigation 5 Words

humus

bits of dead plant
and animal parts
in the soil



load

the weight that is
carried or supported
by something



system

a collection of
interacting parts that
work together to
produce a function



Investigation 5 Words

Many Thanks:

Graphics by the
amazingly talented:



Fonts by the lovely:



Thank You!

If you find you need more pages for an investigation, please email me at rebecca.seeley81@gmail.com!

I would be happy to add anything that is needed. I have not taught this kit however I have spent a long time going through the manuals and creating what I thought would be needed in addition to what my own students used. Please let me know if I missed anything that you would find helpful in your classroom.