Science/Social Studies
AMI Instructions

Day 1:

Science Read "Atoms" and answer the questions on the next page.

Social St. Read "The Stamp Act" and answer the Matching questions on the page.

Day 2:

Science Read "What Is Energy?" and answer the questions on the next page.

Social St. Read "The Boston Tea Party" and answer the Matching questions on the page. Do not do the Activity.

Day 3:

Science Read "Properties of Light" and answer the questions on the next page.

Social St. Read "Lexington and Concord" and answer the Matching and Fill in the Blank questions on the page.

Day 4:

Science Read "How Matter Changes" and answer the questions on the next page.

Social St. Read "The Second Continental Congress" and answer the Matching questions on the page.

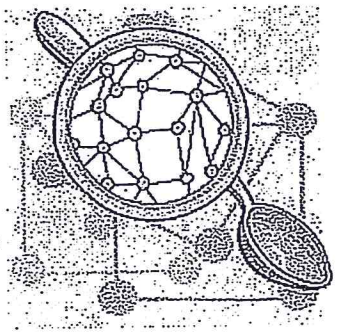
Day 5:

Science Read "What Does a Biologist Do?" and answer the Multiple Choice questions on the next page.

Social St. Read "The Battle of Bunker Hill" and answer the Matching and Constructed Response questions on the page.

Atoms

By Cindy Grigg



1 Look around you; what do you see? Everything- and I do mean everything- you see is made up of matter. Matter is the "stuff" that makes up everything. **Matter** is anything that has mass and takes up space.

2 **Mass** is the measure of how much material makes up the object. Mass is measured in grams. A nickel has the mass of about one gram. Mass is related to how much something weighs. But mass and weight are not the same things.

3 Matter has volume. This is just another way of saying that matter takes up space. **Volume** is a measure of how much space something takes up. Volume is measured in liters.

4 Even some things you can't see are matter. Air is matter. You can't see air, but you can see things that air moves. Blow on a piece of paper. Watch a tree outside. You will see the paper move and will probably be able to see the leaves blowing on the tree. Moving air caused them to move. You can even touch air. Blow up a balloon. Poke the balloon with your finger. You can feel that something is inside the balloon.

5 Things like dreams or ideas are not matter. They are not made of any "stuff." They do not take up space. You can't touch an idea or a dream.

6 Collect a group of objects that seem to have nothing in common. For instance, let's say you have a nail, an orange, and a dog. These things don't seem to have anything in common, do they? The dog is alive. The nail and the orange are not alive. The nail is made of metal. The orange came from a tree. They have different colors, sizes, and shapes. But there is one thing that they do have in common: they are made up of atoms.

7 All matter is made up of atoms. Atoms are too small to see. **Atoms** are small particles that make up all matter. Two or more atoms can join together. They make larger particles of matter. Two atoms are still too small to be seen. But many of these larger particles can join together to make the matter you see.

8 Think about holding a tiny piece of sand in your hand. If you drop the piece of sand on the kitchen floor, it is very hard to find it again. Now think about dropping a whole bucket of sand on the kitchen floor. It would make a large pile of sand. But don't really do that because your mom would not be happy! One piece of sand is like one atom. The bucket of sand is like a group of atoms joined together

to make one large piece of matter.

9 We know there are many different kinds of atoms. Some matter is made up of only one kind of atom. A piece of iron is made of only one kind of atom. Gold is only one kind of atom. If all the atoms are the same kind, we say that piece of matter is an element. An **element** is made of only one kind of atom. All the atoms of an element are the same.

10 Other matter is made of more than one kind of atom. Two different kinds of atoms join together to make water. Two different kinds of atoms join together to make the salt you put on your French fries.

11 Water and salt are very different. They are both matter. They both have mass. They both take up space. They are both made of atoms. They are different because they are made of different kinds of atoms.

Name _____  Date _____

Atoms

1. What is matter? (A) Anything that has mass and takes up space (B) A measure of how much space something takes up (C) The measure of how much material makes up the object	2. Atoms are: (A) Small particles that make up all matter (B) Too small to see (C) Both A and B
3. An element is: (A) Made of different kinds of atoms (B) Made of only one kind of atom (C) Not made of atoms	4. Air is: (A) Matter (B) Mass (C) Atoms
5. Dreams and ideas are: (A) Not matter (B) Matter (C) Atoms	6. Water and salt are different because: _____ _____
7. All matter is made of: (A) Atoms (B) Mass (C) Elements	8. From reading paragraph 9, we could infer (guess) that _____ and _____ are two elements. _____ _____

Name: _____ Date: _____

The Stamp Act

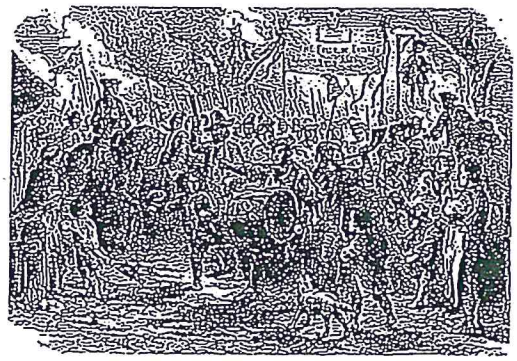
It was common in England to raise money by requiring people to buy government stamps for official documents. On March 22, 1765, a similar law went into effect in the colonies. The **Stamp Act** required colonists to pay for a government stamp on newspapers, pamphlets, playing cards, dice, documents, and legal papers, including marriage licenses.

This tax was imposed to raise money to pay the cost for wages and expenses of the 10,000 British soldiers stationed to defend the frontiers against Native American attacks.

Colonists protested that Parliament didn't have the right to tax them because they had no members in Parliament to represent them, a right guaranteed by the British Constitution. **Patrick Henry** gave a speech against taxation without representation. The **Virginia House of Burgesses** declared the Stamp Act illegal and passed resolutions saying England had no right to tax people in Virginia.

In October 1765, delegates from nine colonies met in New York. The group, known as the **Stamp Act Congress**, pledged to resist paying any taxes not approved by their colonial legislatures. Many merchants promised to stop importing British goods. Colonists organized groups like the **Sons of Liberty** whose members felt strongly about unjust taxes.

Angry crowds met the Stamp Masters when they arrived from England to enforce the law. People rioted, destroyed offices, burned the stamps, and forced many Stamp Masters to resign or leave town. The Stamp Act caused so much dissension that it was repealed a year later. However, Parliament passed a Declaratory Act, which gave them the right to pass laws in the colonies.



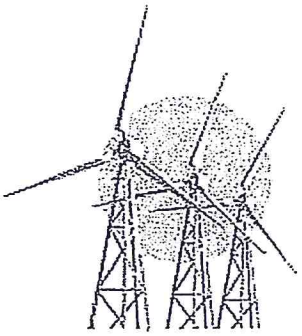
UNIT THREE: REVOLUTION & CONSTITUTION

Matching

_____	1. Stamp Act	a.	pledged to resist paying any taxes not approved by their colonial legislatures
_____	2. Patrick Henry	b.	gave a fiery speech against taxes without representation
_____	3. Virginia House of Burgesses	c.	declared the Stamp Act illegal and passed resolutions saying England had no right to tax people in Virginia
_____	4. Stamp Act Congress	d.	required colonists to pay for a government stamp on certain paper documents, playing cards, and dice
_____	5. Sons of Liberty	e.	group of colonists who had strong feelings against unjust taxes

What Is Energy?

By Patti Hutchison



[1] Energy is defined as the ability to do work. Every living thing needs energy. Most of it comes from the sun. Plants are producers. They capture the sun's energy. They use it to grow and reproduce. Any energy that is not used by the plant is stored. Animals are consumers. They eat the plants to get energy for their own life processes. We need energy in order to be able to do anything.

[2] What did you eat this morning? Did you have a bowl of cereal? A piece of toast? These foods are made from grains, which come from plants. When you eat them, you are consuming the energy the plants have stored from the sun. This energy is released by your body. It helps you to do work.

[3] Solar energy flows through the food chain. The food chain is a diagram that shows how energy from the sun is used by producers. It also shows how this energy is transferred to consumers in an ecosystem.

[4] There is energy all around us. What do we use it for? We use it to keep warm. We use it to power our vehicles. Did you ever stop to think of where this energy comes from? If you heat with wood, it comes from plants. Even fossil fuels such as gasoline come from decayed plants and animals. Where did they get this energy they are now giving off? You guessed it- from the sun!

[5] Energy sources are like natural resources. They can be renewable or nonrenewable. Solar energy is, of course, a renewable resource. The sun isn't likely to burn out for billions of years. It will keep sending solar energy our way.

[6] Energy from plants is also a renewable energy source. Trees are cut for firewood to heat our homes. They can be replanted. If our forests are managed in this way, we will have wood to use as energy for years to come.

[7] Fossil fuels, on the other hand, took millions of years to form. It would take millions of years for them to form again. These are nonrenewable sources of energy. Some examples are coal, oil, and natural gas.

[8] There is a scientific law that says that energy cannot be created or destroyed. However, it can change from one form to another. There are two basic types of energy. Energy is either potential or kinetic.

[9] Potential energy is stored energy. Think of Niagara Falls. The water at the top of the falls has potential energy. Kinetic energy is the energy of motion. As the water falls over the cliff, the energy changes from potential to kinetic.

[10] Gasoline, made from oil, is stored in a tank below the ground. At this point, it has potential energy. When it is burned in a car engine, it makes the car move. It now has kinetic energy.

[11] Energy also comes in different "kinds." Some of these include chemical, electrical, mechanical, and nuclear energy. They light our homes. They power our machines and cars. All these different types of energy have one thing in common- they have the ability to do work.

Name _____ Date _____

What Is Energy?

1. What is the definition of energy? _____ _____	2. Most of Earth's energy comes from: (A) Niagara Falls (B) The sun (C) Automobiles
3. What is a food chain? _____ _____	4. Resources such as solar energy and wood are called: (A) Renewable (B) Fossil fuels (C) Nonrenewable
5. Resources such as oil, natural gas, and coal are: (A) Nuclear energy (B) Nonrenewable (C) Renewable	6. Name the two types of energy. _____ _____

Name: _____ Date: _____

The Boston Tea Party

The British **East India Company** controlled the tea trade between India, Great Britain, and her colonies. By 1773, this company had a surplus of over 18 million pounds of tea. The tax on tea and the boycotts of British products by colonists had hurt the company.

On May 10, 1773, Parliament passed the **Tea Act.** The law gave a monopoly on tea to the East India Company. A **monopoly** is complete control over a product or service. Only the East India Company could import tea into the colonies. The law also permitted the East India Company to sell tea directly to the colonies through its own agents. Rather than raising the tax on tea, the Tea Act actually lowered it. By lowering the price, it was hoped that the colonists would buy more tea.

It would seem that any law that lowered taxes would be welcomed by the colonists, but that wasn't the case. The first to protest were colonial merchants who had been making money importing tea (sometimes legally, sometimes by smuggling). Other merchants joined the protest. They feared that if Parliament could grant a monopoly on tea to one company, it might grant monopolies on other products also, putting them out of business. Merchants also stirred up the colonial radicals by claiming this was simply another sneaky way for England to tax the colonists. As a result, crowds rioted in protest.

In December 1773, three British ships carrying East India tea anchored in Boston Harbor. The colonists refused to let the tea come ashore, and the ships refused to leave without unloading. Several thousand colonists complained to the governor, but he refused to listen. In protest of the Tea Tax, about 150 members of the **Sons of Liberty** disguised as Native Americans dumped 340 chests of tea into Boston Harbor on the night of December 16, 1773. This later became known as the **Boston Tea Party.**

Did You Know?
There was another "tea party" in the colonies. At the Yorktown Tea Party on November 17, 1774, two half-chests of tea were thrown into the York River.

Matching

_____ 1.	East India Company	a. complete control over a product or service
_____ 2.	Tea Act	b. protested against the Tea Tax
_____ 3.	monopoly	c. tea dumped in Boston Harbor by Sons of Liberty
_____ 4.	Sons of Liberty	d. gave a monopoly on tea to the East India Co.
_____ 5.	Boston Tea Party	e. controlled the tea trade between India, Great Britain, and her colonies

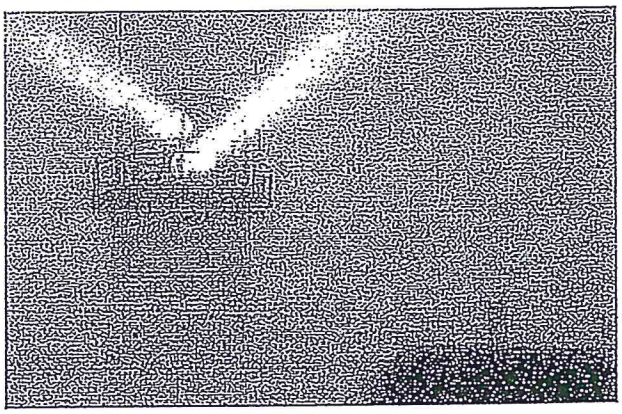
Activity

Directions: The colonial tax on tea amounted to about three cents a pound. Find out how much the sales tax is where you live. Compare the tax colonists paid on a pound of tea to the amount you would pay today on a pound of tea.

1. Today's sales tax: _____
2. Today's price for a pound of tea: _____
3. Sales tax on one pound of tea today: _____

Properties of Light

By Cindy Grigg



[1] Light is one form of energy that travels in electromagnetic waves. This energy is both magnetic and electrical.

[2] There are many different types of electromagnetic (EM) waves. Most of them cannot be seen by humans. Our eyes see only a small portion of EM waves called visible light. Visible light is made up of different colors. The colors are red, orange, yellow, green, blue, indigo, and violet. The colors are due to the different wavelengths of light. The longer the wavelength, the less energy the wave has. The shorter the wavelength, the more energy it has. The longest wavelength of visible light looks red to us. The shortest wavelength of visible light looks violet to us.

[3] Here are some **properties of light**:

[4] **Light travels out in all directions from its source.** What are some sources of light? The sun is our main source of light on Earth. Some other sources are other stars and fire.

[5] **Light is made of little particles called photons.** A photon is the smallest possible particle of electromagnetic radiation. These particles travel in waves.

[6] **Light travels in straight lines called rays.**

[7] **Light travels "at the speed of light."** This speed is about 186,000 miles per second (670 million miles per hour), or about 300,000 kilometers per second. The speed of light is sort of a galactic "speed limit." So far, nothing has been found that can travel faster than light.

[8] **Light can travel in a vacuum.** A vacuum is empty space. There are no molecules of air or anything else in a vacuum. Like all forms of electromagnetic waves, light can travel through empty space, as well as through matter.

[9] **Light can be absorbed.** Absorbed light energy is converted into some other form, such as thermal or heat energy. You can test this by putting a piece of black construction paper and a piece of white construction paper on a sunny windowsill. Place a thermometer for measuring outdoor or room temperature under each piece of paper. Wait a few hours, and then check the two temperatures. The thermometer underneath the black paper should be hotter than the one under the white paper. This is the reason people tend to wear dark colors in the wintertime and white or light colors in the summer. Dark colors absorb light, helping us keep warmer in the winter. In the summer, light colors absorb little of the sun's energy, keeping us cooler.

[10] **Light can be reflected.** If you shine light on a surface, some of that light will bounce off, or be reflected by, the surface. The *law of reflection* tells us that light will always be reflected by a surface at the same angle at which it hits the surface.

[11] **Light can be refracted.** Light always travels in straight lines. But when it passes from one medium into another, it changes direction slightly. Refraction occurs because light travels at

different speeds through different materials. When light passes through air into water, for example, it slows down. The light rays are bent slightly. You can see this if you put a pencil into a half-glassful of water. The pencil looks bent or broken at the water line. This is due to refraction. Objects that we see get their color from the light they reflect. A green object looks green because it absorbs all other colors but reflects green.

12 **Light can be transmitted.** Sometimes light passes through matter. This is called transmission. Light is transmitted through some matter more easily than through other kinds of matter. Light is transmitted through water, air, and glass very easily. These materials are said to be transparent. *Transparent* materials allow light to be transmitted through them easily. Some matter transmits some, but not all, of the light that hits it. This material is called *translucent*. Some examples of translucent material are waxed paper or glass blocks. *Opaque* matter does not transmit any light. You cannot see through it because light doesn't pass through it. A book and a brick wall are two examples of opaque materials.

Name _____ Date _____

Properties of Light

1. What is the smallest possible piece of electromagnetic radiation? (A) Waves (B) Photons (C) Rays	2. How does light travel? (A) In straight lines (B) In rays (C) In waves (D) All of the above
3. What is the speed of light? (A) About 186,000 miles per second (B) All of the above are correct (C) About 670 million miles per hour (D) About 300,000 kilometers per second	4. Light cannot be absorbed. (A) False (B) True
5. Light can be reflected. (A) False (B) True	6. Light can be transmitted through matter. (A) False (B) True
7. These materials allow light to be transmitted through them easily. (A) Transparent (B) Opaque (C) Translucent	8. Something that transmits some, but not all, of the light that hits it is called: (A) Opaque (B) Translucent (C) Transparent

Name: _____ Date: _____

Lexington and Concord

On the night of April 18, 1775, colonists in Boston learned the British planned to arrest Samuel Adams and John Hancock and raid the supply depot in Concord. The Boston Committee of Correspondence sent riders to warn Adams and Hancock and to alert the **militia** at Concord of the surprise attack.

When the 600 British soldiers reached Lexington, they found about 80 armed men commanded by Captain Jonas Parker waiting on the village green. The colonists were ordered to put down their weapons and leave. Realizing they were badly outnumbered, Parker ordered his men to disperse, but not to give up their weapons. Suddenly, someone fired a shot. No one knows whether that first shot was fired by a British or colonial soldier. The first shot fired at Lexington has been called "the shot heard 'round the world."

The warning from Prescott gave the people at Concord time to move their weapons and ammunition to safety. News from Lexington arrived before the British. About 400 armed colonials waited for them at a bridge outside Concord. After a short battle, the British commander decided to retreat. The troops began marching back to Boston, a distance of about 16 miles.

At first, the retreat was calm and orderly. Suddenly, musket fire erupted from the woods along the road. Militia units from Lexington, Concord, and other cities had prepared an ambush. The orderly march turned into a **rout**. Nearly 300 British soldiers were killed or wounded. Only the arrival of reinforcements saved them from complete disaster as they continued their hasty retreat to Boston.

Although there had been skirmishes before, Lexington and Concord were considered the first battles of the Revolutionary War. The victory boosted the morale of the colonists. Although they had not yet declared their independence, the **Revolutionary War** had begun.

Matching

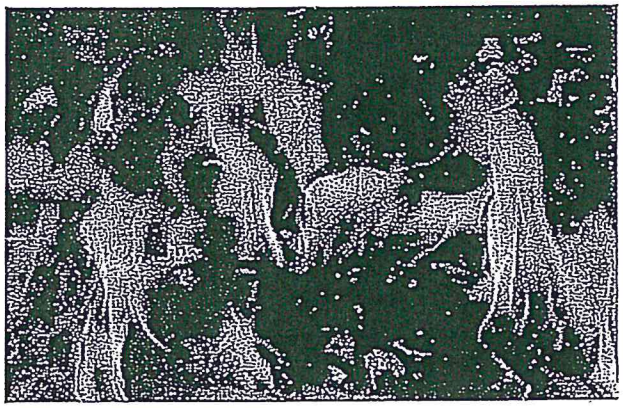
_____ 1.	rout	a. war between the American colonies and Britain
_____ 2.	militia	b. armed colonists
_____ 3.	Revolutionary War	c. disorderly, hasty retreat

Fill in the Blanks

1. The first shot fired at _____ has been called "the shot heard 'round the world."
2. The Boston _____ of _____ sent riders to warn Adams and Hancock and to alert the militia at Concord of the surprise attack by the British Regulars.
3. _____ and _____ were considered the first battles of the Revolutionary War
4. When 600 British soldiers reached Lexington, they found about 80 armed men commanded by _____ _____ _____ waiting on the village green.

How Matter Changes

By Cindy Grigg



[1] Changes in matter happen around you every day. Some changes make matter look different. Other changes make one kind of matter become another kind of matter.

[2] When you scrunch a sheet of paper up into a ball, it is still paper. It only changed shape. You can cut a large, rectangular piece of paper into many small triangles. It changed shape and size, but it is still paper. These kinds of changes are called physical changes.

[3] **Physical changes** are changes in the way matter looks. Changes in size and shape, like the changes in the cut pieces of paper, are physical changes. Physical changes are changes in the size, shape, state, or appearance of matter.

[4] Another kind of physical change happens when matter changes from one state to another state. When water freezes and makes ice, it is still water. It has only changed its state of matter from a liquid to a solid. It has changed its appearance and shape, but it is still water. You can change the ice back into water by letting it melt. Matter looks different when it changes states, but it stays the same kind of matter.

[5] Solids like ice can change into liquids. Heat speeds up the moving particles in ice. The particles move apart. Heat melts ice and changes it to liquid water. Metals can be changed from a solid to a liquid state also. Metals must be heated to a high temperature to melt. **Melting** is changing from a solid state to a liquid state.

[6] Ice melts at 0 degrees Celsius or 32 degrees Fahrenheit. This is the melting point (or freezing point) of water. If the temperature goes above this temperature, the ice will melt. Heat speeds up the moving particles in ice. If the temperature goes below this temperature, water will freeze. At colder temperatures, the moving particles slow down.

[7] You have probably seen a puddle of water that disappears after a time. The water in the puddle changed into a gas. Matter **evaporates** when it changes from a liquid to a gas. Water in the form of gas is called water vapor.

[8] Water changes quickly into a gas when water is heated to a temperature of 100 degrees Celsius or 212 degrees Fahrenheit. This temperature is the boiling point of water. Heat makes water particles move fast.

[9] Cooling air causes water vapor to change to a liquid. Matter **condenses** when it changes from a gas to a liquid.

[10] Have you ever had a glass of lemonade with ice on a hot summer day? Did you notice the water that beaded up on the outside of the glass? The cold glass cooled the air around it. Then water vapor in the air condensed to small drops of water on the outside of the glass.

[11] Another way matter can change is a chemical change. A **chemical change** takes place

when matter changes into a different kind of matter. An example of a chemical change is burning wood. The wood changes into smoke and ash. This chemical change produces heat and light.

12 Have you ever seen a nail or other piece of metal that was rusted? Rusting is a chemical change, too. The metal in the nails mixes with the air to form a different kind of matter, rust.

13 Have you ever seen an old piece of silverware that has turned black? This is another kind of chemical change. A gas in the air causes a black covering called tarnish to form on silver. The tarnish is a different kind of matter from the air or the silver.

14 Signs of a chemical change are a change in color or temperature or the production of heat or light. Bubbling, fizzing, or making a noise or smell are some more signs. Not all of these things happen during a chemical change. But usually at least one of them does happen.

15 Changes in the way matter looks are physical changes. A physical change happens when matter changes from one state into another. A chemical change takes place when matter changes to a different kind of matter.

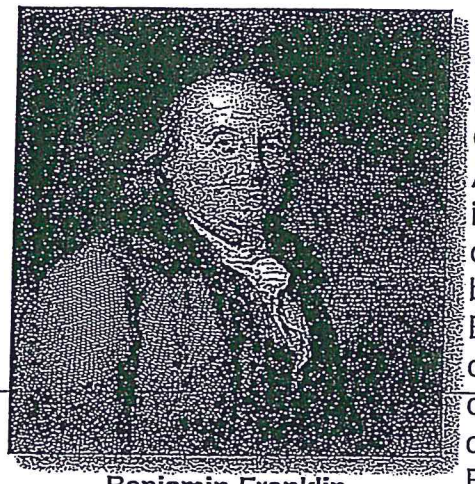
Name _____ Date _____

How Matter Changes

1. A physical change is a change in the: (A) Size and shape (B) State of matter (C) Appearance (D) All of the above	2. Changing from a solid state to a liquid state is called: (A) Melting (B) Freezing
3. What is the melting point of ice? (A) 100 degrees Celsius (B) 32 degrees Fahrenheit (C) 212 degrees Fahrenheit	4. What is the freezing point of water? (A) 100 degrees Celsius (B) 32 degrees Fahrenheit (C) 212 degrees Fahrenheit
5. When a liquid changes to a gas, we say it: (A) Evaporates (B) Freezes (C) Condenses	6. When a gas changes to a liquid, we say it: (A) Freezes (B) Condenses (C) Evaporates
7. What kind of change happens when matter changes into a different kind of matter? (A) Change in states of matter (B) Chemical change (C) Physical change	8. Give two examples of a chemical change. _____ _____
9. Which of these is **not** a sign that a chemical change has happened? (A) Change in color (B) Bubbling (C) Change in state of matter	

Name: _____ Date: _____

The Second Continental Congress Meets



Benjamin Franklin

After the battles at Lexington and Concord in April 1775, an informal state of war existed between Great Britain and the colonies. Under the joint command of Ethan Allen and Benedict Arnold, colonial forces captured Fort Ticonderoga. Colonial soldiers also surrounded Boston, keeping British General Gage and his soldiers confined to that area.

Representatives from all 13 colonies hurried to Philadelphia where the **Second Continental Congress** met on May 10, 1775. Patrick Henry and Sam Adams wanted to declare independence immediately, seize British officials, and send for help from France and Spain.

Not everyone in the colonies wanted to go to war against Great Britain, however. For example, even though Benjamin Franklin helped write the Declaration of Independence, his son, William, remained loyal to England.

Even after the **Declaration of Independence** was signed in 1776, announcing to the world that the colonies were independent states and no longer ruled by Britain, opinion was divided. About a third of the colonists, called **Patriots**, wanted independence. Another third were **Loyalists** who did not want to rebel against Britain. The last third were **"fence sitters"**—people who hadn't made up their minds either way.

The majority of the representatives hoped to avoid war. They sent a message to the king saying they didn't plan to separate from Great Britain, but if the British continued to use force, they would resist with force.

Think About It

Why do you think the term "fence sitter" was used to describe colonists who hadn't made up their minds about independence?

Matching

_____ 1. fence sitters

_____ 2. Declaration of Independence

_____ 3. Patriots

_____ 4. Second Continental Congress

_____ 5. Loyalists

a. announced the colonies were independent states
b. colonists who did not want to rebel against Britain
c. meeting of representatives from all 13 colonies
d. colonists who had not made up their minds about independence
e. colonists who wanted independence

Name _____  Date _____

What Does a Biologist Do?

1. What does a biologist study? (A) People (B) Plants (C) Environments (D) All of the above	2. What is a habitat? (A) A kind of animal (B) A branch of science (C) The area where something lives and its environment (D) A habit that you keep doing over and over
3. A marine biologist studies _____. (A) Mammals (B) Food (C) Men in the army (D) Plants and animals that live in the ocean	4. Cells are _____. (A) The smallest part of a living thing (B) Small animals (C) Telephones (D) Small plants
5. Extinction is _____. (A) When all the dinosaurs died (B) When a type of plant or animal is lost forever (C) When there are no more living things of one kind (D) All of the above	6. What is DNA? (A) Something found in each cell (B) Used to solve crimes (C) Used to identify individuals (D) All of the above
7. Biologists study plants and animals. (A) False (B) True	8. Doctors and nurses must know biology. (A) False (B) True

What Does a Biologist Do?

By Cindy Grigg

[1] Is science your favorite subject in school? Are you wondering what kinds of jobs there are in the field of science? One type of career in the science field is that of a biologist. A biologist studies living things and their environments, or the world around them, and how living things affect and are affected by their environment. The area where something lives and its environment is called a habitat.

[2] When biologists talk about living things, they mean much more than just animals. Biologists study everything from algae, to one-celled animals like amoebas, to slime molds, to plants, to invertebrate animals, to mammals. Every living thing lives in an environment, or habitat, that is suited to the way the organism lives. There are lots of different kinds of living organisms because there are lots of different kinds of environments.

[3] Some biologists study one type of environment and all the different living things that make up that habitat. For example, a marine biologist studies plants and animals that live in the ocean. Some biologists study just humans and their environments. Some cell biologists study cells which are the smallest part of a living thing. Cell biologists study the way cells are made, the parts that make up a cell, the way these parts all work together and interact with their surroundings, and the cell's life cycle. The study of cell biology has led to an understanding of human tumors and maybe someday will help scientists find a cure for cancer.

[4] Some biologists might work in zoos or aquariums. They keep the animals healthy and design habitats that are best suited to each animal. They educate the public about how to protect animals in the wild. They also work to protect endangered animals from extinction. If one kind of animal becomes extinct, then we have lost it forever.

[5] Some forensic biologists work with police to discover evidence that can be used to solve crimes. They find and identify finger prints, blood, and DNA. DNA is something found in each cell that can be used to identify individuals. Each person's DNA is different from every other person's.

[6] Many biologists work in health professions. Doctors, nurses, and lab technicians all must have a good understanding of biology. Some doctors study infectious diseases and try to find ways to keep people from getting sick. Sometimes biologists find a vaccine so that we can just get a shot and not have to worry about getting a disease. Sometimes biologists find ways to make the diseases we do get less dangerous to us.

[7] Biologists may study cells under a microscope, insects in a rainforest, snakes in a desert, viruses that affect humans, plants in a greenhouse, or endangered animals around the world. Biologists help us by teaching us about human health, environmental threats, and meeting humans' increasing needs for more food supplies. If you like working with people, animals, or cells, being a biologist might be just the right career for you!

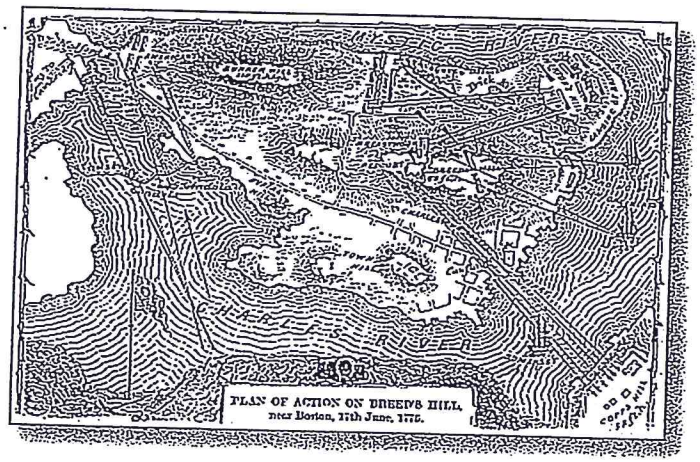
Name: _____ Date: _____

The Battle of Bunker Hill

The Second Continental Congress appointed **George Washington** as commander in chief of the Continental Army. If they did go to war, they would need an experienced soldier in charge.

Before Washington reached the main army, General Gage decided to try to break out of Boston by force and teach the colonists a lesson. Hearing of the plan, the American commanders were ordered to fortify **Bunker Hill** on the north side of the city. They made a mistake and dug trenches on **Breed's Hill**, a smaller hill closer to the waterfront.

Did You Know?
The battle known as Bunker Hill actually took place on Breed's Hill.



The colonists were able to stop the first two attempts by the British to take Breed's Hill, but were forced to flee when troops charged the hill a third time and the colonists ran out of ammunition. Although technically they lost, the battle at Breed's Hill convinced many colonists they could beat the British easily.

The king ordered a **naval blockage** on all the colonies to prevent colonists from receiving supplies. He proclaimed that all the colonies were rebels. Members of the Second Continental Congress recognized that peace with Great Britain might no longer be possible. They sent **ambassadors** to France, Spain, and the Netherlands to request aid.

UNIT THREE: REVOLUTION & CONSTITUTION

Matching

_____ 1. George Washington
_____ 2. Battle of Bunker Hill
_____ 3. naval blockade
_____ 4. ambassador

a. using ships to cut off supplies and trade to the colonies
b. representative from one country to another
c. really the Battle of Breed's Hill
d. commander in chief of the Continental Army

Constructed Response

Explain why many colonists were convinced they had beaten the British Army at the Battle of Bunker Hill (Breed's Hill). Give specific details or examples to support your answer.