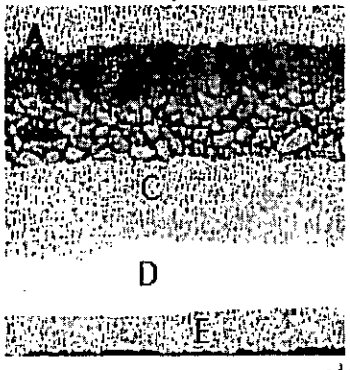
Earth Science 1 Study Cards

Gary found two identical fossils. One fossil was buried in his yard and another was buried by the lake. What does this fossil tell him? 1	Fossils are found in what type of rock? 2	Where did the small grains of sand on a beach come from? This process is called: _____ 3	How do fossils form in sedimentary rock? 4
How do farmers prevent soil erosion? 5	What is the process of sediment being washed or blown away? 6	How is a delta formed at the mouth of a river? 7	What are some fast changes to earth's surface? 8
What is soil made up of? 9	What does a fossil shell tell us about the area where it was found? 10	How are islands in the ocean formed? 11	How are canyons formed? 12
Why does fast water (or wind) move bigger particles than slow water (or wind)? 13	oldest to youngest?  14	What causes stalagmites to form in caves? 15	What does a glacier cause as a result of erosion? 16

Earth Science 1 Study Cards A

The fossils are the same age if they are identical. 1	Sedimentary Rock 2	Weathered (broken down) rocks. Weathering 3	1. Animal dies and sinks into sediment. 2. The sediment continues to be deposited on the body 3. The sediments harden and are pressed over millions of years. 4. The fossilized remains become part of the rock. 4
Terracing (steps) Contour (strips) Or keeping crops in the ground 5	Erosion by wind, water, or ice 6	Deposition of sediments from the river as it empties into a larger body of water. 7	Volcanic Eruptions Earthquakes Landslides Mudslides 8
+weathered rocks and minerals +Decayed organic material (humus) +water and air 9	The area was once under water. 10	Deposition of volcanic lava. 11	A river erodes the rock below it over a very long time. 12
Faster water or wind has more force to move larger particles of sediment. 13	E= oldest (bottom) D C B 14 A = youngest (top)	Deposition- minerals deposited from dripping water 15	Glaciers scrape and erode mountains to form valleys. 16

front Earth Science 2 Study Cards Q

What are the steps of Fossil Fuel Formation? 1	What is coal? 2	What is oil? 3
What is Natural Gas? 4	What are the 3 fossil fuels? 5	How is hydro-electrical energy changed into electricity? 6
What is biofuel? 7	What is Geothermal Energy? 8	What causes wind? 9
What are the 5 main alternative energy resources? Why do people want to find alternative energy sources? 10	How is solar energy changed into electricity? 11	How is wind energy changed into electricity? 12
What are renewable resources? 13	What are non-renewable resources? 14	What is the original source of energy for all fossil fuels and alternative energy resources? 15

Back Earth Science 2 Study Cards A

1. Ancient plants and animals get energy from the sun 2. They die and are covered in sediment 3. Heat and pressure over millions of years turns the remains into coal, oil, and natural gas 4. Humans mine and burn fossil fuels for energy 1	A solid fossil fuel created from ancient plants. 2	A liquid fossil fuel created from ancient ocean animals. 3
A fossil fuel in gas/vapor form. 4	Coal, oil, and natural gas 5	The river flows through the turbines inside the dam. 6
Biofuels are renewable fuels that are created from plants such as corn. 7	Geothermal Energy is the Earth's underground heat. 8	The uneven heating of the earth's surface causes cold and warm air to move. 9
Biofuels, Geothermal, Wind, Solar, and Hydroelectrical Energy Fossil Fuels and nonrenewable, expensive, and cause pollution 10	Solar panels convert solar energy into electricity. 11	Wind turns wind turbines to create electricity. 12
Renewable resources can be created again in a short amount of time. 13	Non-renewable resources take millions of years to create or have a limited supply on the planet. 14	SOLAR ENERGY!!! 15

Earth Science 3 Study Cards

Q

1. What is weather?	2. What is Climate?	3. What is the difference between weather and climate?
4. What is the main source of energy for the water cycle?	5. How is weather measured?	6. Define evaporation.
7. Define condensation.	8. Define precipitation.	9. Define runoff and collection (accumulation).

A

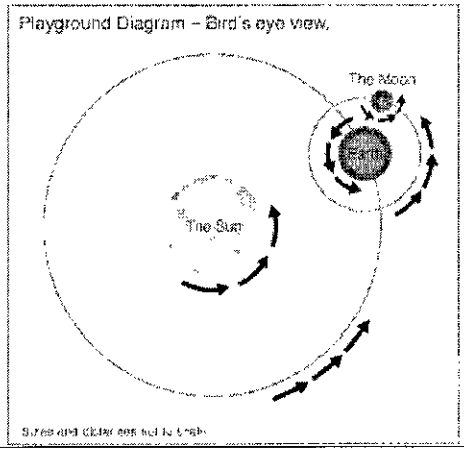
1. Weather is the condition of the atmosphere over a short period of time.	2. Climate is the general conditions of an area over a long period of time.	3. Weather is short term and could be anywhere. Climate is long term and is specific to the area.
4. Solar Energy!	5. Weather- temperature, air pressure, humidity, precipitation	6. When a liquid is heated and forms a gas.
7. When gas cools and forms water droplets (liquid).	8. Water that falls to the surface as rain, snow, or hail.	9. When water runs downhill and collects in rivers, lakes, the ocean, etc.

Earth Science 4 (Space) Study Cards

1 In what directions does the sun appear to rise and then set?	2 When do we see longer shadows?	3 What is rotation?
4 What is revolution? How do the Earth and moon stay in orbit?	5 What are some main properties of the sun?	6 What are some main properties of the Earth?
7 What are some main properties of the moon?	8 Draw and label the relationship between the Sun, Earth, and Moon.	9 What causes tides?
10 What causes Earth to change seasons?	11 What causes the moon phases?	12 What is the order of the planets? How do the planets stay in orbit?

Earth Science 4 (Space) StudyCards

A

1 The Sun appears to rise in the East and set in the West.	2 We see longer shadows early and later in the day. The higher the sun is in the sky, the shorter the shadows.	3 The turning of a planet or moon on its axis. (Spinning in place)
4 Revolution is the orbit of a planet or moon around another object. Gravity keeps all objects in orbit.	5 Provides solar energy Burning gas/ star Gravity Rotates Center of solar system	6 Atmosphere- weather Liquid water Life Rocky- mountains and craters Gravity rotates
7 Revolves around earth- 28 days Gravity No atmosphere Reflects suligh Craters and mountains	8 	9 The moon's gravity pulls on the oceans, causing the tides to move up and down.
10 The Earth's tilt on it axis causes the amount of sunlight to change during the one year (365 day) orbit around the sun.	11 The moon phases are caused by the reflection of the sun's light off the moon's surface as it orbits Earth every 28 days.	12 Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune Gravity keeps all objects in orbit.

Physical Science 1 Study Cards

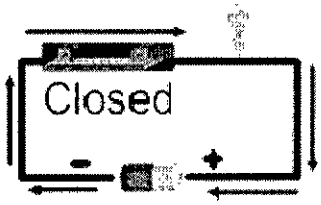
Define buoyant/buoyancy. 1	What are some examples of materials that are buoyant? 2	What are some examples of materials that are non-buoyant? 3	What is a mixture? What are some examples of mixtures? 4
What is condensation? What are some examples of condensation? 5	Define freezing point. What is the freezing point of water? 6	What is a solution? What are some examples of solutions? 7	What type of material is magnetic? 8
Define boiling point. What si the boiling point of water? 9	List some methods of separating mixtures 10`	List the method to separate solutions. 11	Define soluble/solubility. 12
Buoyant/buoyancy- material that floats in water because it is less dense than water 1	Wood, foam, plastic, ice, oil, cork, pepper 2	Metal, sand, rocks, dirt 3	A mixture is a group of materials mixed together that can keep their own physical properties and be separated easily. EX. Salad, gravel, pizza, pattern blocks, legos. 4
Condensation is the point at which enough energy is lost from a gas to form a liquid. EX. Water droplets, fog, clouds 5	Freezing Point is the point at which energy is lost for a material to turn from liquid to a solid. 0°Celcius= freezing point of water 6	A solution is a typeof mixture where material dissolves and can only be separated by evaporation. EX.Salt water, sugar water, koolaid, ice cream, air 7	Materials containing iron are magnetic. 8
Boiling point- when enough energy has been added for a liquid to become a gas. 100°C = boiling point of water 9	Sieve, screen, filter, hand, magnet, thongs 10	Solutions can only be separated by evaporating the water. 11	Soluble/Solubility- the ability of a material to dissolve (break down into tiny parts to mix evenly) in water 12

Physical Science 2 Study Cards

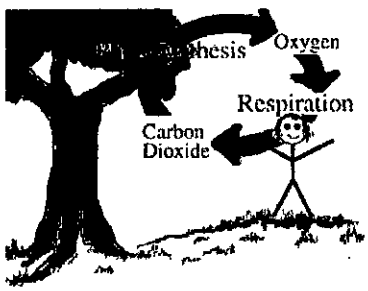
Q

What is refraction? 1	What is a thermometer? How does it work? 2	Draw and label a closed circuit. 3	Define conductor. List some materials that are electrical and thermal conductors. 4
How does sound energy travel? 3	What is mechanical energy? List some examples. 4	What is reflection? When do we see reflection? 5	Define Insulator. List some electrical and thermal insulators. 6
What is friction? 7	What is force? 8	What is a lens? List examples of when we use lenses. 9	What is thermal energy? How does it transfer (move)? 10

A

When light travels THROUGH matter and bends as it slows down. 1	A thermometer measures temperature. Heat energy makes the liquid in the thermometer expand, causing it to rise. 2	 3	Conductors allow energy to flow through them easily. Ex. Metals such as steel and copper 4
Sound energy travels by vibration. 3	Mechanical energy is motion energy. Ex. Fan, toy car, blender 4	When light bounces off the surface of an object. Ex. Mirror 5	Insulators block energy from coming through. Ex. Wood, plastic, cloth 6
Friction is the force that rubs against an object to slow it and create heat. 7	Force is a push or pull to change the movement of an object. 8	A lens is a clear, curved object that refracts light. Ex. Microscope, camera 9	Thermal energy is the energy of moving particles. It moves by causing other particles to move faster. 10

Life Science 1 Study Cards

Q	What is complete metamorphosis? What are some examples? 1	What is incomplete metamorphosis? What are some examples? 2	What are the stages of a plant life cycle? 3
	What are the stages of a frog life cycle? 4	What is an inherited trait? What is an example? 5	What is a learned behavior? What are some examples? 6
	Draw and label the Carbon Dioxide Oxygen Cycle. 7	What is photosynthesis? 8	Define germinate/ germination. 9
A	Insect life cycle that has 4 stages: egg, larva, pupa, adult 1	Insect life cycle that has 3 stages: egg, nymph, adult. 2	Seed, germination, growth, mature plant with flowers or fruit. 3
	Eggs, tadpole, froglet, adult frog 4	Traits that are passed down from parent to offspring. Ex. Fur color, ear shape, sense of smell 5	Behaviors that are learned in life. Ex. Speaking French, liking music, finding food/hunting 6
	 7	The process where plants create food from sunlight and give off oxygen. 8	When a seed sprouts to grow a new plant. 9

What is a consumer? 1	What is a producer? 2	What are the 4 main types of consumers? 3	What is a decomposer? 4
What are some important plant adaptations for the Desert? 5	What are some important plant adaptations for the Rainforest? 6	What are some important plant adaptations for the Tundra? 7	What are some important plant adaptations for the Wetlands? 8
What are some important plant adaptations for the Grasslands? 9	What are some important plant adaptations for the Forest? 10	What are some important animal adaptations for the Rainforest? 11	What are some important animal adaptations for the Tundra? 12
What are some important animal adaptations for the Wetlands? 13	What are some important animal adaptations for the Grasslands? 14	What are some important animal adaptations for the Desert? 15	What are some important animal adaptations for the Forest? 16

A consumer is a living organism that must eat (consume) another organism to get energy. 1	A plant that creates its own food energy by photosynthesis. 2	Herbivore-*only plants* Carnivore- *only animals* Omnivore- *both plants and animals* Decomposer- *dead organisms* *3*	A decomposer breaks down dead animals and wastes to create nutrients in the soil. 4
Desert- avoid water loss *Plants*- store water, have spines, tiny leaves, special roots, white "hair" to reflect light 5	Rainforest- competition for sunlight/ poor soil *Plants*- waxy leaves, drip tips, tall, smooth bark, roots in the air, climb or grow on trees, carnivorous 6	Tundra- frozen soil, harsh winds, limited sunlight in winter, dry *Plants*-dark "hair" to absorb light, grow in small clumps, grow only in summer, no deep roots 7	Wetlands- fresh water *Plants*- flexible stems, floating leaves, waxy leaves, may not have roots, may have floating seeds 8
Grasslands- herbivores, fires, dry season *Plants*- special roots and leaves that can be eaten, trampled, burned but plant will live, growth only during rainy season, wildflowers attract insects to spread pollen 9	Forest- 4 seasons, trees *Plants*- lose leaves in winter or evergreen trees have small leaves- to avoid water loss, wildflowers bloom before trees get their leaves in spring, animals eat fruits and nuts to spread seeds 10	Rainforest- live in trees or on dark forest floor *Animals*- camouflage, mimicry, bright colors, strong beaks and curved feet, long tails 11	Tundra- frozen soil, harsh winds, limited sunlight in winter, dry *Animals*- migrate, hibernate, stocky body, change coat color, think fur or body fat 12
Wetlands- fresh water *Animals*- water repellant (oily) hair or feathers, webbed feet or long legs, able to swim 13	Grasslands- grass, few trees (little cover), dry season *Animals*- live in herds, burrow to hide, migrate for food and water, hooves and flat teeth to eat grass 14	Desert- avoid water loss/ keep body cool *Animals*- nocturnal, burrow, get water from food, shed fur, larger ears 15	Forest- 4 seasons, trees Animals- hibernate or migrate in winter, store food, 16