

Boiling

3-4

Melting

3-4

Water Vapor

3-4

Boiling is also the change from a liquid to a gas but faster with bubbles of gas forming in the liquid at a given temperature because a lot of heat is being added from a source. Water boils at 100 degrees Celsius or 212 degrees Fahrenheit.

Melting occurs when a solid is heated enough to change to a liquid. When solid ice melts, it changes to liquid water. Ice melts at 0 degrees Celsius or 32 degrees Fahrenheit.

Small droplets of water.

Surface Area

3-4

Absorbed

3-4

Heat

3-1

The area of liquid exposed to or touching the air.

3-4

When a liquid soaks into a material.

A form of energy that moves between objects to make them warmer.

Conductor

Insulator

3-4

Rubbing

3-4

A material that heat moves through easily.

3-4

Material that heat does not move through easily.

3-4

Moving two objects together.

3-4

Burning

3-4

Electricity for heat

3-4

Position

3-5

When materials are burned in a fire, heat can be produced (wood or candles).

3-4

When electricity is used, heat can be produced (light bulbs and some stoves).

3-4

Location of an object which can be identified by using a reference point (above, below, inside of, underneath, or on top of).

3-5

Distance

3-5

Motion

3-5

Speed

3-5

The amount of space between two objects or places (recorded in centimeters, meters, or kilometers).

3-5

A change in position.

3-5

Describes how quickly an object moves.

3-5

Force

3-5

Gravity

3-5

Friction

3-4

A push or a pull.

3-5

A force everywhere that pulls things to Earth.

3-5

Rubbing things against one another to produce heat.

3-4

Direction

3-5

Push

3-5

Pull

3-5

The path/course along which something is moving: up, down, left, right, north, south, west, or east.

3-5

A force that puts an object into motion.

3-5

A force that puts an object into motion.

3-5

Pitch

3-5

Volume

3-5

Vibrations

3-5

How low or high a sound is and depends on how fast an object is vibrating. Pitch is affected by the length, thickness, and tightness (tension)

3-5

Describes the loudness or softness of a sound.

3-5

A rapid back and forth movement.

3-5

Strength of vibration

3-5

Distance of vibrations

3-5

Sound

3-5

Strong vibrations will produce a loud volume. Soft vibrations will produce a volume that sounds softer.

3-5

If the sources of the vibrations are farther away, the volume of the sound is softer. If the sources of the vibrations are closer, the louder the sound will be.

3-5

A form of energy that comes from objects that are vibrating.

3-5

Igneous

3-3

Sedimentary

3-3

Metamorphic

3-3

This type of rock was once melted but has cooled and hardened. They may be glassy or grainy with crystals of different types of minerals in them. Granite is an example.

3-3

This type of rock is usually made up of pieces of rock called sediments. These rocks may contain animal shells or skeletons. Sandstone and limestone are examples.

3-3

This type of rock was made by heat deep inside the Earth. Marble and slate are examples.

3-3

Humus

3-3

Sand

3-3

This is a type of soil that is made up of decayed plants and once living organisms. It is very dark, soft, and very crumbly.

3-3

This type of soil has large grains with large spaces between the grains. This lets water leave it quickly. Sand feels gritty.

3-3

Clay

3-3

Silt

3-3

Clay has very small grains, much smaller than sand or silt and holds water easily. This makes clay sticky when wet, but when it dries, it forms hard clumps.

3-3

Silt has pieces that are smaller than sand. It feels like powder.

3-3

Luster

3-3

Fossil

3-3

Mold Fossil

3-3

**The way a mineral can look –
shiny, pearly, or glassy.**

3-3

**The remains of a living thing that lived long
ago and has turned to rock.**

3-3

**An opening in a rock that has the shape
of a once living thing. Fossil imprints of
leaves and other thin objects are molds.
The leaves or animal parts rotted away
long ago.**

3-3

Cast Fossil

3-3

Preserved Parts Fossil

3-3

Ocean

3-3

A mold that has been filled in with sediments which harden and take the shape of the once living thing.

3-3

Actual parts of the living thing such as shells, bones, or teeth that have turned to stone.

3-3

Large bodies of salt water that surround a continent.

3-3

Seas

3-3

Rivers

3-3

Streams

3-3

Large bodies of salt water that is often connected to an ocean.

Large, flowing bodies of fresh water that usually empty into a sea or ocean.

3-3

Small, flowing bodies of fresh water that flow into rivers.

3-3

Lakes and Ponds

3-3

Glaciers

3-3

Volcanoes

3-3

Areas where water, usually freshwater, are surrounded by land. They differ in size with ponds usually being smaller than lakes.

3-3

Huge sheets of ice that covers land. They are found where temperatures are very cold, for example, high in the mountains or near the poles of the Earth.

3-3

An opening in the Earth's surface from which lava flows. As the lava hardens and builds up, a volcanic mountain forms.

3-3

Mountains

3-3

Valleys

3-3

Canyons

3-3

A place on Earth's surface where the land is much higher than the land that surrounds it. Some mountains are tall and rocky and others are rounded and covered with trees. A mountain area that has a flat top is called a plateau.

3-3

A lowland area between higher areas such as mountains. Sometimes rivers can wear away land to form valleys.

3-3

A deep valley with very steep sides. They are often carved from the Earth by a river.

3-3

Caverns

3-3

Islands

3-3

Fuels

3-3

**A large cave or underground chamber.
Caverns or caves or formed underground
when water wears away the rock.**

3-3

**An area of land that is entirely surrounded by
water. Sometimes islands are located in lakes,
or they may be out from the seashore as
barrier islands.**

3-3

**Earth materials come from inside the Earth
and are used as fuels. For example, fuels such
as oil and coal can be burned to produce heat
or made into gasoline to help run cars.**

Weathering

3-3

Erosion

3-3

Deposition

3-3

When weathering is happening, earth materials, for example rocks are broken apart. Little or big cracks in the rock are evidence that weathering is taking place.

When erosion is happening, Earth materials, like rock, sand, and soil, are being carried away from their original location. Water and wind are often the causes for erosion.

3-3

When deposition is happening, Earth materials that have been eroded are put in a new location. When the wind stops blowing, sand and soil may be put down in piles as large as dunes. Water may deposit its material at the end of a river and form a delta.

3-3

Landslides

3-3

Volcanic Eruptions

3-3

Floods

3-3

Earth materials, like rock, sand, and soil, on the side of a slope or cliff drop to a lower location. Water soaking into the ground often makes this happen.

3-3

When this happens, Earth material called lava comes out of the volcano and flows down the side of the volcanic mountain (or is sent up into the air and lands nearby) where it hardens.

3-3

When a flood is occurring, a lot of water causes rivers and streams to overflow their banks over the surrounding land around them. Heavy rainfall in the area is usually the cause of a flood.

3-3

Earthquake

3-3

Mass

3-4

Volume

3-3

When an earthquake is occurring, the surface of the ground shakes and rolls causing damage to the Earth's surface, like cracks and other openings, and damage to roads and buildings.

3-3

Mass is how much matter is in an object. Mass can be measured with a balance. An object with a large mass feels heavier than an object with a smaller mass.

3-4

Volume is the amount of space an object takes up. Volume of a liquid can be measured with a beaker, graduated cylinder, or syringe. An object that takes up more space has a greater volume.

Matter

3-4

Solid

3-4

Liquid

3-4

Matter is anything that has mass and takes up space.

3-4

Solids have definite size and shape, that is the size and shape do not change.

3-4

Liquids have a definite volume, but they take the shape of their containers.

3-4

Gas

3-4

Freezing

3-4

Evaporate

3-4

Gases do not have a definite shape or volume. Gases take the shape and size of their container.

3-4

To change from a liquid to a solid.

3-4

When a liquid changes into a gas slowly.

3-4

Condense

3-4

Balance

3-4

Thermometer

3-4

To change from a gas to a liquid.

3-4

A balance is a TOOL used to find the mass of an object using the UNITS of grams.

3-4

A thermometer is a TOOL used to find the temperature of water or air. The unit used is degrees Celsius.

3-4

life cycle

3-2

habitat

3-2

adaptation

3-2

The pattern of growth and development of every plant or animal.

3-2

A place where an organism or groups of organisms live and obtain the air, food, water, shelter or space, or light needed to survive.

3-2

A characteristic that improves the organism's ability to survive.

3-2

Seed

3-2

Seedling

3-2

Mature Plant

3-2

Seeds are produced and may be stored in fruits. Seeds contain tiny underdeveloped plants and enough food for growth to start. Seeds need water and warmth to grow.

3-2

Seedlings are baby plants and produce the parts of the plant (roots, stem, and leaves) that will be needed for the adult plant to survive.

3-2

Mature plants have roots, stems, and leaves, and also develop flowers or cones which produce seeds.

3-2

Roots

3-2

Stems

3-2

Leaves

3-2

Roots are the first structure to grow. They take in water and nutrients from the habitat. Root sizes vary for each variety of plant and are adapted to the habitat.

3-2

The stem is the second structure to grow. They move and store water and nutrients in the plant. They also provide support and protection for the plant. For example, the woody stems of trees protect the tree during its long life cycle.

Leaves produce food for the plant in the presence of light. Leaf size, texture, thickness, and shape are adapted to the plant's habitat.

Flowers

3-2

Fruit

3-2

Germinate

3-2

This structure of a plant often has special sizes, smells, shapes, or colors that attract organisms for pollination.

3-2

This structure is the part of the plant that forms around the seed to protect it.

3-2

To begin to grow.

3-2

Physical Adaptation

3-2

Behavioral Adaptation

3-2

Hibernation

3-2

A body structure that an organism has that allows it to meet its need in its habitat.

3-2

It is an activity or action that helps an organism survive in its habitat.

3-2

A resting state that helps animals survive in winter. The animal's body processes, like breathing, slow down and they survive on stored food or fat.

3-2

Defense

3-2

Locomotion

3-2

Migration

3-2

Some animals have special adaptations to protect themselves from being hurt, killed, or eaten. For example physical adaptations, quills and claws; or behavioral adaptations like mimicry, playing dead, or spraying.

3-2

The ability of an animal to move around to find the resources they need for food, shelter, or space.

3-2

The movement of animals over the same route in the same season each year. This behavior allows animals to take advantage of resources in one location when they run low in another location.

3-2

Food Obtainment

3-2

Camouflage

3-2

Seed Dispersal

3-2

Animals have special structures used for getting food, for example the beaks of birds, teeth, or claws shaped in different ways depending on the type of food they eat.

3-2

A color or pattern that allows an animal to blend into its environment and protects it from being seen from its enemies or allows it to sneak up more easily on their food.

3-2

In order to ensure that seeds will survive, they must be carried away from the parent plant. Seeds can be dispersed by: floating, carried by the wind, eaten by animals, or by attaching themselves to animal fur or clothes.

3-2

Response to light (plants)

3-2

Color

3-2

Structure

3-2

Plants need sunlight or some other light source to survive and will grow towards the light. Plants use the light for the energy it needs to make its food.

3-2

Flowers come in many shapes, sizes, and colors. Petals are colored and scented to attract insects and other creatures for the purpose of pollination.

3-2

A part of a living organism.

3-2

Producers

3-2

Consumers

3-2

Decomposers

3-2

Any green plant, which use sunlight to make food for energy. Producers are the first organisms listed in a food chain.

3-2

An organism (usually an animal) that obtains its energy by eating other organisms (plants and/or animals).

3-2

An organism (for example worms, mold, or mushrooms) that obtains its energy by feeding on and breaking down dead plants and animals. They are often not listed in a food chain even though they are always the final link.

3-2

Food Chain

3-2

Metamorphosis

3-2

The way scientists describe the way that energy is passed from one organism to another. A food chain uses arrows to show the direction in which energy is passed.

3-2

This occurs in the life cycle when an animal begins as an egg and then undergoes changes in appearance, color, shape, or growth of new structures. For example, in a beetle the stages of metamorphosis are called egg, larva, pupa, and adult.

3-2