

ignis

[IG nis] fire

igneous (ous (E.) - full of) - pertaining to fire

ignite - to set on fire

ignition - act of "firing up" or starting an engine; setting anything afire

Teaching Notes:

Igneous rocks - In geology, we speak of rocks according to the way they were formed in the far distant past. Stratified rocks are formed by layers (strata) of sediment at the bottom of a lake or ocean, compressed over time into limestone, shale, etc. Igneous rocks are formed by fiery temperatures far below the earth's surface. There is magma (molten rock) down there under us which sometimes moves up toward the surface and cools into dense stone such as granite. Sometimes the magma pours out on the earth's surface in the eruption of a volcano and forms basalt, pumice, etc. Rocks and stones are very interesting to study! Ignition - There aren't many derivatives from ignis, but this is one which is used all the time. The ignition of your car provides the spark which lights the fuel and fires up your engine. When rockets are sent up, we have GO! IGNITION! BLAST OFF!

Vulcanus

[wool KAH noos] Vulcan – Roman god of fire

volcano - a crack in the earth pouring out hot magma (molten rock) and hot gases

volcanic - like or pertaining to volcanoes

vulcanize - to treat raw rubber with heat and sulphur to make it harder and more durable

vulcanite - hard rubber, treated with heat and sulphur

vulcanology - (logos - word, study) - the study of volcanoes

Teaching Notes:

Vulcanus - The Roman god of fires and volcanoes. He was feared when the Romans first began to worship him. Later, they thought of him as married to Venus, the goddess of beauty, so he settled down and became the god of metal working, blacksmiths, and heavy industry. He wasn't completely domesticated though, as the Romans found out in 79 A.D. when the volcanic mountain, Vesuvius, erupted and buried the beautiful little seaside city of Pompeii. Maybe it was Vulcan who "started the ignition" of Mount St. Helens in Washington State on May 18, 1980! (This is a great take-off point for a study of Pompeii and of famous volcanic eruptions that have taken place around the world.)

Vulcanize - To treat with heat and sulphur to make rubber hard and durable so that it can be used for car, truck, and airplane tires. Sulphur is associated with volcanoes because the gases that come out of vents or cracks in the ground near a volcano smell like sulphur. You can smell sulphur in the smoke when you blow out a match. The process of vulcanization may not smell very good, but it does wonderful things to rubber. Traveling America depends on Vulcanus for its smooth-riding tires!

hydros

[HEW dross] (HEE dross) water

hydroplane - (L. planus - flat surface) - boat that glides on the surface of the water

hydrophobia - (phobos - fear) - fear of water

dehydrate - (de - down, away from) - take water away

hydrogen - (genos, origin) - a gas which, when burned, produces water

hydrophone - (phone - sound) - instrument to "hear" under water

hydrology - (logos - word, study) - study of water

hydroelectric - (electron - amber) - electricity produced by moving water

Teaching Notes:

Hydrogen is one of the original elements listed on the periodic table of chemical elements. Hydrophobia (see Teaching Notes on page 7). Hydroplane - Most children have seen hydroplane boat races on TV where the boats skim across the water surface. Hydroelectric - is a word first used in 1884 to refer to a way of generating electricity by using moving water to turn turbines. The interesting partner word is electron - the Greek word for amber, a jewel which is really fossilized resin formed in prehistoric forests around the Baltic Sea millions of years ago. Ancient Greek traders brought these lumps of amber resin home where people valued it because it was pretty and easy to carve. Thales of Miletus, a Greek philosopher in 600 B.C., discovered that amber had strange characteristics. When he rubbed it with cloth, it would attract little feathers, threads, and straw. In the 1500s, an Englishman, William Gilbert, found other things, such as glass and sulphur, which behaved like amber and he called them "electrica". What we know as "electricity" took thousands of years getting itself discovered. But aren't we glad we have it now? Thales and Gilbert would be amazed! Do you have a piece of amber you could show the children?

aqua

[AH quah] water

- aquarium - a pond or tank of water where fish or water plants can live
- aqueduct - (duco, ductum - lead) - a structure for bringing water to where it is needed
- aquaculture - (cultura - till, cultivate) - growing food in water (fish, oysters, seaweed)
- aquamarine - blue-green color of water
- aquaplane - (planus - flat surface) - surf board
- Aquarius - a constellation called "Water Carrier"
- aqueous humor - (humor - moisture) - fluid in the eye between the lens and cornea
- aquifer - (fero, latum - carry) - a layer under the earth where water flows

Teaching Notes:

How about a trip to the aquarium? – or, better still, is there one in school to look at? Aqueduct – notice the “e” in aqueduct! It is commonly misspelled since we expect it to be spelled with an “a” like its root, AQUA. The Romans were great engineers, and since they needed clean, healthy water in their cities, they built magnificent bridges over land and valleys so cool mountain water could flow by gravity down to the fountains and storage cisterns of the towns. Aqueducts can still be seen today. Someone could find a picture of the Pont du Gard near Nîmes, France, in the encyclopedia. Someone might like to build a model! Aquarius - There is a series of entertaining stories about the constellations and how they got their names. The Egyptians believed that Aquarius, the water carrier, caused the annual floods of the Nile River. The zodiac sign, Aquarius, comes from the hieroglyph for “running water.” Aqueous humor - This part of the eye is easy to find on a cross-section drawing of the eyeball. A small introduction to anatomy may be in order here. Aquifer - notice the “i” in this spelling. Some layers underground are solid rock. Others are porous, carry water, and are called aquifers.

bonus

[BOH noos] good

bonus - something extra good

bon bon (French) - beautifully decorated candy; a good
"goody"

bonny (Scottish) - good looking

boon - a good deed; a favor

bounteous - (-ous - full of) - plentiful good

bounty - plenty or reward

bonanza (Spanish - fair weather, prosperity) - rich find
in a gold mine

debonaire (Fr. - of good disposition) - kindly, jaunty

Teaching Notes:

Bonus is one Latin word which the English language has adopted without change. We think of a bonus as a premium which is given when something is purchased, or as an extra payment beyond one's salary, given for extra effort, or when business has been especially good. The word is found in all the "Romance" languages (languages which come from the language of the Romans). The French, of course, took the Latin word bonus from the Gauls who, in turn, had gotten it from Julius Caesar's conquering soldiers.

The last word in the list, debonaire, was originally a French phrase, de bonne aire, which meant, "kindly; gracious; of a good or gentle disposition". It undoubtedly came to England with the Norman Conquest of 1066. The first published use in English was written "debonere" in 1225. Until the time of Samuel Johnson, who wrote the first dictionary of the English language in 1755, spellings were rather flexible (though phonetic). In the present English spelling of the old French phrase, we abbreviate the phrase to a single word, debonaire. The French actor Maurice Chevalier exemplified this pleasant word.