

novem

[NŌ wem] nine

November - ninth month in the Roman calendar

novena - devotions for nine days in the Roman Catholic church

novennial (annus - year) - nine-year period or celebration

novemdigitate - (digitus - finger) - having nine fingers

novendial - (dies - day) - lasting nine days

Teaching Notes:

Our word nine and novem come from the ancient Indo-European word neun, meaning “nine”. An earlier Latin form of novem was noven which was related to the word NOVUS meaning “new”. It seems they had an early system of counting in which they used sets of four (fingers, not counting the thumb). The Indo-European word oktu meant two fours so the next number (noven, or nine) started a new set! (Someone else’s fingers, no doubt! Or perhaps they used toes as well?) It is fascinating to explore early counting systems. Early calculators (calx, calcis - limestone pebble) which consisted of pebbles lined up in grooves on a flat surface led, much later, to the abacus and then to IBM computers! For many of us, however, nothing has ever quite taken the place of fingers for quick calculations! Usually we use our thumbs as well, so most of us feel very comfortable with the base 10 (decimal) number system.

November is the ninth month when you start counting with March, as the early Romans did.

In early Christian times, prayers were said at dawn (roughly 6:00 a.m.) and then every three hours: the third hour, terce; the sixth, midday; the ninth, none. Later the hours were shifted back and none became noon. An old word (schenche - pouring out) was combined with none and so nuncheon was when workers in the field stopped for the “noon pouring out” and took a good long drink! When time allowed, they had a lump of bread as well. Obviously they preferred combining lump and nuncheon to have LUNCHEON!

Perhaps you can plan to teach this lesson to be followed immediately by LUNCH. You and the children will be ready for it!

decem

[DEH kem] ten

December - Tenth month in the old Roman calendar

decennial - (annus - year) - Tenth anniversary or celebration

decemdentate - (dens, dentis - tooth) - having ten teeth

decemfoliate - (folium - leaf) - having ten leaves

decempedal - (pes, pedis - foot) - having ten feet

decemplicate - (plico, plicatum - fold) - tenfold or ten copies (think of duplicate, triplicate)

Teaching Notes:

December - Romulus, Rome's founder, invented a ten-month calendar ending with December. (See SEPTEM, page 39.) Because December, which means tenth, is the twelfth month in the modern calendar, it reminds us each year of those twin baby boys, Romulus and Remus. The legend says that Numitor, the good King of Alba Longa, was deposed by his wicked brother, Amulius. To prevent Good Old Numitor from having heirs who might take back the throne, Amulius forced Numitor's only child, Silvia, to become a Vestal Virgin, a priestess who is forbidden to marry. The god, Mars, married her anyway and she had twin boys. Enraged, Amulius had the twins thrown into the Tiber River, but they floated to shore and were found and nurtured by a she-wolf until a peasant and his wife adopted them and raised them to manhood. Then, Romulus founded the city of Rome and built a fine wall around it. Remus mocked his industrious brother, and one of Romulus's soldiers killed him. Romulus invented the ten-month calendar and, after reigning for forty years, mysteriously vanished in a storm. Ever since, people have shown their respect for him by keeping the calendar he designed even though the number names September, October, November, and December no longer fit.

The meanings of the rest of the words up in the list of derivatives are easy to figure out when you know the partner root words. Use DECEM and make up your own new words!

centum

[KEN toom] hundred

cent - one hundredth of a dollar

century - a set of one hundred

centurion - Roman military officer over 100 men

centimeter - (metron - measure) - one hundredth of a meter

centennial - (annus - year) - a hundred-year celebration or anniversary

percent - (per - through) - number of parts in every hundred; 10 cents is 10 percent of a dollar

centipede - (pes, pedis - foot) - hundred-footed "bug"

centigrade - (gradus - step, degree) - temperature scale with one hundred degrees between freezing and boiling

Teaching Notes:

Century, to us, usually means a hundred years, but it can mean a set of one hundred of anything: a collection of 100 poems, a group of 100 soldiers, etc. You hold in your hands a century of Latin and Greek roots!

Centipedes are bugs which appear to have "about a hundred legs or feet". They come in all sizes (some up to 8 or 10 inches long in tropical countries!). *Webster's Dictionary*, Second Edition says they are "of active, predacious and nocturnal habits", meaning they they keep very busy at night, mostly preying on (fortunately for us!) insects.

A centipede locomotive is a railroad engine which has the pilot ("cowcatcher" to us) and one truck wheel in front of its cylinders and six big driving wheels behind. It is not for express passenger trains but for heavy freight. Here is a diagram of those wheels: $\lt; o = 000000$. The child who looks up "locomotive" will find other wheel arrangements.

The centigrade scale has one hundred degrees between the freezing and boiling temperatures of water. At zero degrees, water hardens into ice; at 100 degrees, it steams away into the air. It is also called Celsius after the Swedish astronomer Anders Celsius who invented it in 1742.

mille

[MEEL leh] thousand

mile - a thousand paces (1 pace = 2 steps - one with each foot)

mill - one thousandth of a dollar

millimeter - (metron - measure) - one thousandth of a meter

millennium - (annus - year) - thousand-year period or anniversary

millipede - (ped, pedis - foot) - thousand-footed "bug"

Teaching Notes:

Mile - Those thousand paces which constituted a Roman mile were marched off by well-exercised Roman soldiers on the thousands of miles of good Roman roads. This measure of distance, varying here and there, spread throughout the Western world. The ancient Roman mile was about 1,620 English yards or 4,860 feet. Our modern mile measures 5,280 feet, so the Roman soldiers weren't quite as tired as you would be, walking the same number of miles. Nautical or sea miles are a bit longer (about 6,080 feet). How you feel about that depends on whether you are swimming or boating!

A mill, which is one thousandth of a dollar or one tenth of a cent, is a favorite unit of money lawmakers use to levy our taxes. Since it is too small to warrant minting a coin, we never actually SEE mills, so perhaps we feel better about paying taxes which are levied in mills.

We are likely to be hearing more about the millennium in the next few years as we approach the year 2000. The millennium has historically been spoken of as a time when evil will have been banished from the world and peace, happiness, holiness, and good government will prevail.

Millipedes don't really have a thousand feet, of course, but it would be pretty hard to count them and prove it! They are fairly harmless and eat only leaves and vegetable matter - which may or may not be all right depending on whose vegetable matter they are eating.

pyro

[pu RO] (pi RO) fire

pyrotechnics - (techne - work, skill) - fireworks

pyrotechnician - (techne - work, skill) - one who is skilled with fireworks

pyre - huge bonfire for burning bodies at ancient funerals (and even today in India)

pyromaniac - (mania - craze) - a crazy person who plays with fire

empyrean - (em - in) - the heavens - home of the fiery sun

pyrometer - (metron - measure) - instrument to measure very hot temperatures

Teaching Notes:

Empyrean - The ancients thought the highest layer of the sky was the home of fire and, therefore, of light. So they called the heavens the “empyrean.”
Pyrometer - Temperatures which are so hot that they are off the top of the mercury thermometer scale, need a pyrometer. People in industry and scientists in laboratories need them. So do vulcanologists need pyrometers to measure the heat in a volcano!

Extra Words:

Pyrite - A common mineral of pale brass yellow color with a brilliant metallic luster. It is called “fool’s gold” because it shines like gold when you find it on a beach or in the mountains. You may think you have “struck it rich” – but no, it’s only “fool’s gold”. REAL gold comes in lumps or nuggets, not the clean, straight crystal shapes of pyrite. Pyrite is really a chemical called iron disulphide, and a lot of it is burned to make sulphuric acid, which is used in batteries. Pyrites (in plural form) - any of several stones which the ancient peoples called “fire-stones” because they were used to strike sparks to make fire. Flint is one of those pyrites.