LIVING MEMORY

K-8 Memory Work for the Secular Homeschool

Drew Campbell

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ABOUT THE AUTHOR

Drew Campbell, PhD, has worked in education since the 1980s and holds degrees in German literature and language from Bennington College and Washington University, St Louis. Dr. Campbell is the author of *Exploring the World through Story*, *Living Memory*, and *I Speak Latin*, and co-author of *How to Homeschool the Kids You Have: Advice from the Kitchen Table*. A former homeschooling parent, classroom teacher, and school administrator, they now work as an independent curriculum developer at Stone Soup Press.

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GRAMMAR AND COMPOSITION

The Eight Parts of Speech¹

A **noun** names a person, place, thing, or idea.

A pronoun replaces a noun.

An **adjective** describes a noun or pronoun.

A **verb** shows action or state of being.

An adverb modifies a verb, adjective, or other adverb.

A conjunction links words, phrases, or clauses.

A **preposition** marks the relationship between one word and another.

An **interjection** expresses excitement or emotion.

Groups of Words

A sentence expresses a complete thought.²

A **phrase** is a group of words, containing neither a subject nor a verb, used as a single unit.

A **clause** is a group of words that has a subject and verb. **Independent clauses** can stand alone as sentences (complete thoughts); **dependent clauses** cannot.

¹ The **article** is sometimes treated as the ninth part of speech, but it can be classed as an adjective since it modifies a noun.

² Many grammar programs give more restrictive definitions involving subjects and predicates, however "No!" is a complete sentence.

Major Historical Periods

The periods listed here are the ones that most students in North America will encounter in their textbooks and other reading, but as they get older, they should be made aware that historical periodization depends on what is being assessed: political events, technological innovations, migrations, intellectual shifts, artistic movements, and so on. The periodization scheme usually taught in North America shows a marked bias toward political events and social changes in Europe and western Asia. It is not absolute by any means.

Period	Starting Date	Description of Precipitating Event				
Prehistory	250,000 ya	Evolution of modern human beings (Homo sapiens)				
Ancient	10,000 BCE	Agricultural Revolution				
Medieval	476 CE	Fall of Rome				
Early Modern	1492 CE	Arrival of European colonizers in the Americas				
Modern	1815 CE	Battle of Waterloo				
Contemporary	1989 CE	Fall of the Berlin Wall				

ya=years ago BCE=Before Common Era CE=Common Era

Multiplication Table and Properties of Multiplication

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Highlighted numbers in the body of the multiplication table are square numbers that students should recognize.

Commutative property of multiplication: $a \cdot b = b \cdot a$ Associative property of multiplication: $(a \cdot b) \cdot c = a \cdot (b \cdot c)$ Multiplicative identity: $a \cdot 1 = a$

9 ← multiplicand <u>x 3</u> ← multiplier 27 ← product

In the equation $27=9 \times 3$, 9 and 3 are factors of 27.

EARTH AND SPACE SCIENCE

ASTRONOMY

The Planets

Mercury

Venus

Earth

Mars

Jupiter

Saturn

Uranus

Neptune

Pluto was reclassified as a dwarf planet in 2006.

Parts of the Sun (Innermost to Outermost)

Core

Radiative Zone

Convective Zone

Photosphere

Chromosphere

Corona

Hubble Classifications of Galaxy Types

Elliptical: disk-shaped galaxy with no arms **Spiral:** nucleus with outward-spiraling arms

Irregular: No definite structure

Meteoroids, Meteors, and Meteorites

Meteoroid: small rocky object that enter the Earth's atmosphere **Meteor**: a meteoroid that is burning in the Earth's atmosphere

(appears as a "shooting star")

Meteorite: the remains of a meteor that has not been completely

destroyed in its fall