Mini-Block: MATH

Date: Aug.16 - Aug. 22

Content/Description:

We will be reviewing the four processes in multi-digit form and practice them using standard algorithms and alternative tools for problem solving (e.g. Lattice Multiplication). We will review place value from tenths to millions; converting whole numbers between standard form and expanded notation; identifying and listing factors and multiples common to a pair or set of numbers.

Objectives/Outcomes

To develop:

- Skill, speed, and accuracy in solving multi-digit addition, subtraction, multiplication, and division problems
- Practice estimation
- Recall in basic multiplication facts (products to 144) and corresponding division facts efficiently
- Recognition/understanding of the importance of place value position in calculations

Block: SCIENCE: Botany Date: Aug. 23 - Sept. 9

Content/Description:

The Four Elements; the Four Seasons; The Lower Plants: Fungi, Algae, Lichen, Moss, Fern, and Conifer. We will be learning about these "lower plants" and how these plants are compared to different stages of human development according to the level of "plant wisdom" they hold. Learning experiences and activities include: nature walks, observational study and drawings, stories, recall, planting trees, integration of language arts skills with an emphasis on the writing process from students brainstorming an idea web, generating a rough draft, participating in peer editing, practicing revision, conferencing with teacher, to final entry in MLB. Student entries are individually generated rather than teacher generated. Periodically, students will practice dictation to strengthen skills in listening, reading, and cursive handwriting.

Objectives/Outcomes

To develop:

- An appreciation for the plant world
- Understanding for plant development
- Understanding for plant diversity
- Appreciation for the interrelationship of plants and the environment.

Content/Description:

Geometry (with a focus on forms and movement): We will be creating freehand renderings of geometric forms after physically experiencing various shapes with our bodies in space, and/or through creating self-constructed three-dimensional models; Triangle, Square, Pentagon, Hexagon, Octagon, and Decagon.

Objectives/Outcomes

To develop:

- An appreciation for movement, change and metamorphosis in geometry
- An understanding for the relationship of geometry to both plane surfaces and three-dimensional forms
- An understanding of perimeter, area, volume, and surface area

Block: SOCIAL STUDIES Date: Sept. 26-Oct. 13

Content/Description:

We will study Ancient Civilizations: India, Persia and read the Ramanyana and Zarathustra

Objectives/Outcomes

To develop:

- A sympathy and tolerance for cultures other than their own
- Knowledge of human society and culture
- Communication (language skills: oral/written)
- Social skills (group work and cooperation, etc.)
- Map making skills

Block: GEOGRAPHY Date: Oct. 17- Nov .23

Content/Description: North American Geography; we will explore historical, social and environmental aspects of the continent we share with Canada and Mexico.

Objectives/Outcomes

To develop:

- Knowledge of American culture
- Appreciation of self and place in American society
- · Impact of white settlement upon the indigenous
- Moral concerns for other people

- A sense of relationship with geographical neighbors
- Map making skills

Block: SOCIAL STUDIES

Date: Nov. 28-Dec.15

Content/Description:

We will study the history and culture of Ancient civilizations: Babylon, Egypt and read classic works from literature: Gilgamesh and Osiris

Objectives/Outcomes

To develop:

- A sympathy and tolerance for cultures other than their own
- Knowledge of human society and culture
- Communication (language skills: oral/written)
- Social skills (group work and cooperation, etc.)
- Map making skills

Block: MATHEMATICS

Date: Jan. 3- Jan 27

Content/Description:

Our focus will be on Common Fractions; Expansion and reduction; x / \div by fractions and whole numbers; lowest common denominator, highest common denominator; highest common factor, and relationship between fractions, percentages, and decimals. We

will also focus on measurement (time and money).

Objectives/Outcomes

To develop:

- Knowledge and ability to communicate in mathematical language
- Skills in computation and problem solving, with practical application
- Understand how fractions relate to percentages and decimals.
- An ability to tell time and calculate elapsed time
- An ability to simulate purchases and calculate the amount of change from a given bill up to \$100.

Block: SOCIAL STUDIES

Date: Feb.6-Mar.8

Content/Description:

We will engage in cultural studies of Greece (Greek Mythology and History), read Homer's <u>Iliad</u>, and Tales of Troy, recite epic poetry, practice creative writing through generation of Greek "Odes" to the gods. Later, in the month of May, students will participate in the Pentathlon ("Olympic Games") combined with other Waldorf Schools.

Objectives/Outcomes

To develop:

- An appreciation for the beginnings of European culture
- A sympathy and tolerance for cultures other than their own
- Knowledge of human society and culture
- Communication (language skills: oral/written)
- Social skills (group work and cooperation, etc.)
- Map making skills

Block: MATHEMATICS

Date: Mar.19-Apr.2

Content/Description:

Decimal fractions. Conversion of common fractions; Importance/significance of decimal point; use the 4 processes as their application; focus on problems involving weights; measure (linear and area sq./cu.); focus on graphing: students will collect and record data, interpret and construct graphs, pictographs, and bar graphs.

Objectives/Outcomes

To develop:

- Knowledge and ability to communicate in mathematical language
- Skills in computation and problem solving, with practical application
- An ability to read data displays and graph data
- Understanding an application of metric system

Block: SCIENCE

Date: Apr.9-May 15

Content/Description:

(Botany) Monocotyledons, Dicotyledons; Photosynthesis; root systems, fruits and seeds; plant geometry

Objectives/Outcomes

To develop:

- Appreciation of the plant world
- Understanding for the process of photosynthesis
- Familiarity with the diversity of seed, root, and fruit systems

DRAMA Class Play Practice (Concurrent with Botany) Apr.9-May 15

Objectives/Outcomes

To develop:

- Confidence in speaking
- Acting skills

***NOTE:** There are no "stand alone" <u>Language Arts blocks</u> in grade 5 as these skills are integratively taught, practiced, and learned in all of the above described disciplines.

Language arts skills that will be regularly taught, developed, and practiced include: reading, exploration of genres/literature, writing, dictation, oral and dramatic presentations, verse/poetry recitations, grammar, spelling, letter writing, all phases of the writing process with emphasis on the Six Traits, dictionary skills, creative and expository writing, reports, communication skills, journaling, reflection and self-evaluation.

Essential Vocabulary for 5th Grade Math

circle graph
composite
decimal
distributive property
divisibility property
elapsed time
equation
equilateral
exponents
expression
flips
greatest common factor
hundredths
isosceles

least common multiple line graph mean order of operations ordered pair percent prime quadrilateral ratio scalene square numbers surface area tenths unlike denominator

Waldorf Curriculum for Grade 5

History:

First historical concepts Ancient India, Persia, Mesopotamia, Egypt, and Greece, up to Alexander the Great. The lives of Manu, Rama, Buddha, Zarathustra, Gilgamesh, Khufu, and Orpheus.

Literature:

Greek Mythology. Scenes from ancient history. Biographies of great men and women.

English & Grammar:

Active & Passive verbs, Use of Capitals, Synonyms, Homonyms, Antonyms, Parts of speech, Punctuation, Subject and predicate, Syntax.

Writing: Composition and emphasis on descriptions, book reports – oral and written. Letter writing.

Spelling: rules and ten words per week. Introduce the dictionary and its use.

Geography: Geography of the United States.

Science: Botany:

Study of the plant in relation to the Earth. The concept of the archetypal plant.

Mathematics: Decimals, Fractions, Mixed numbers, Reciprocals, Metric System.

Drawing: Free Geometric Drawing, dynamic drawing. Draw first in rigid Egyptian and Babylonian style; Borders in Block. Books can be designed using Greek and Egyptian forms.

Painting:

Work from darkness into light

Handwork:

Knitting: using four needles to make socks, mittens, and hats.

Woodwork:

Work with Sloyd Knife to carve an egg and then a simple toy. The aim is to consciously awaken the hand. Study of complex shapes.

Modeling:

Bas-relief in Roman style

Music:

Three-part singing; the major and minor scales. Playing above the octave; Rounds and cannon s in major and minor.

Physical Ed:

Rhythmic exercises; tumbling and building of human pyramids, Greek sports: Javelin, discus, shot put, high jump, long jump, etc. Kickball and softball.

Notes: The child's self-consciousness becomes stronger. At this age, the child is in harmony with himself and herself and his or her surroundings!