Botany Written Exam Part 1

Requirements: Introduction and Conclusion; page numbers; grammar and spell check. This paper is due the weekend of Zoology.

Introduction:		
Material Scope and Sequence	**Preparation of Environment**	**Explain Purpose to Parent**
Second Great Lesson	Time Line of Life	To give the child the scientific concept of the evolution of life.
Living and Nonliving	Samples of living things Samples of nonliving things Basket for materials Pictures of living and nonliving things Prepared labels for living/nonliving	To help the child to classify everything in the universe into two categories. To help the child to organize information in his/her brain – applies to all botany.
Three Domains	Samples/pictures of organisms from each Domain Eggs to demonstrate Prokaryote and Eukaryote cells Prepared labels for 3 Domains Three Domains material Basket for pictures/definitions	To help the child to classify living things into 3 categories by cell type. Two Domains are bacteria; one Domain is all other living things including plants and animals.
Five Kingdoms	Samples/pictures of organisms from each Kingdom Prepared labels for 5 Kingdoms Five Kingdoms material Basket for pictures/definitions	To help the child classify living things into 5 categories by how the organisms meet their needs – movement, respiration, senses, growth, reproduction, excretion, feeding.
Plant and Animal	Samples of plants and animals Prepared labels for Plant and Animal Paper and pen for comparing and contrasting Plant and Animal characteristics Pictures of plants and animals Basket for materials	To help the child to classify living things into the 2 categories of plant and animal. To help the child to compare and contrast the characteristics of plants and animals.
Parts of the Plant	Real plant with all the parts – roots, stems, leaves, flowers, fruits, and seeds Real plant for each student – student collects Paper for plant to lay on Tape Pens/pencils for labeling parts of the plant 3x5 cards for definitions Parts of the plant nomenclature Books on plants	To help the child to understand the parts of and the functions of the parts of the plant. To utilize the detailed powers of observation of the child.

Parts and Types of Roots	Real roots with all the parts; fibrous and tap roots; types of tap roots Real roots for each student – student collects Paper for roots to lay on Tape Pens/pencils for labeling parts/types of roots 3x5 cards for definitions Parts/types of roots nomenclature Books on roots	To help the child to understand the parts of and the functions of the parts/types of the root. To utilize the detailed powers of observation of the child.
Adventitious roots (Botany II)		
Charts and Experiments	Experiment materials Chart #1, 2, 3, 4, 5, 12, 17, 18	Experiments are a practical application of the function of the root so the child understands how the root functions. Experience with the actual root. Charts are a visible demonstration of the function of the roots. Charts give the child an impression of the function and importance of the roots.
Parts and Types of Stems		
Stem Growth (Botany II)		
Specialized Aerial Stems		
Specialized Underground Stems		
Charts and Experiments		
Parts of Leaves		
Leaf Venation		
Leaf Margins		
Leaf Blades		
Leaf Attachment/Arrangement		
Leaf Shapes (Botany Cabinet)		
Specialized Leaves (Botany II)		
The Bulb		
Leaf Abscission		
Leaf Adaptations		
Charts and Experiments		
Parts of the Flower		
Stamens and Pistils		
Fused/Separate Flower Parts		
Flower Arrangement		
Flower Inflorescence		
Specialized Flowers (Botany II)		
Grass Flowers		

Pollination		
Modifications for Pollination		
Charts and Experiments		
Parts of the Fruit		
Types of Fruit		
Types of Succulent Fruit		
Types of Dry Fruit		
Specialized Fruit		
Parts of the Seed		
Types of Seeds		
Germination (Botany II)		
Conditions for Germination		
Plant Reproduction		
Seed Dispersal		
Charts and Experiments		
Monocot/Dicot Plants		
First Knowledge of Plants		
How Plants Satisfy Needs		
Plant Kingdom Charts		
Plant Life Cycles (Botany II)		
Plant Growth		
Prokaryotic Cell		
Eukaryotic Cell		
Plant Cell		
Water, nitrogen, carbon cycles		
Conclusion:		