Plant Calendar Project
Worth 2 – 100 pt. Assessment Grades

Date due :
_____

This project is designed to show what you have learned about plant diversity, plant structure and function, plant growth and development, and plant uses in our lives. You will develop a calendar that has drawings, examples, and facts about the above topics. You will be given a Word file that contains one copy of each month for you to print either at home or at school and 13 blank pages for the cover and drawings. All drawings must be hand drawn, labeled, and, in color. All written information must be neatly printed and one fact displayed within one box of the calendar. Pictures may be drawn, xeroxed and colored, computer printed, or cut out of magazines. All information may be researched from any of the following sources: **1. Videos** –Seedless Plants, Gymnosperms, Angiosperms **2. Books** – in Rm. 317, at home, in the library **3. Internet** – start at http"//biologyweb.org and go to the Botany section **4. Your text** + **class text** – Ch. 22-25 **6. CDROMs** – Nonflowering Plants, Flowering Plants, Roots and Stems, The Leaf **7. Labs and stations set up in class**.

This is a list of items that must be included:

Cover

Cover must include:	
1. Title: The Plant Kingdom	2. drawings or pictures of a variety of plants
3. Name, Date period	4. the characteristics that all members of the plant kingdom possess

January

Drawing - Bryophytes - Life Cycle of a Moss - Your text p. 558

Calendar- explanation of gametophyte, sporophyte, archegonium, antheridium, sporangium, haploid generation in bryophytes, diploid generation in bryophytes, dominant generation in bryophytes, three examples with names and pictures, five interesting facts

February

Drawing - Seedless Plants - Life Cycle of a Fern Your text p. 563

Calendar - explanation of dominant generation in seedless plants, haploid generation in ferns, diploid generation in ferns, prothallus, rhizome, frond, three examples of seedless plants with names and pictures, five interesting facts

March

Drawing - Gymnosperms - Life cycle of a conifer – Your text p. 611

Calendar- explanation of microspore, megaspore, pollen, microgametophyte, megagametophyte, seed, three examples of gymnosperms with names and pictures, five interesting facts

April

Drawing - Angiosperms - Life Cycle of an angiosperm- Your text p.614
Parts of a Flower Your text p.612

Divide page in half with a vertical line!

Calendar - explanation of perfect flower, imperfect flower, complete flower, incomplete flower, stamen, anther, filament, stigma, style, ovary, pistil, sepal, three examples of angiosperms with names and pictures, five interesting facts

May

Drawing - 1) Leaf - Cross Section of a Leaf – Your text p. 596
2) Drawing of simple leaf, compound leaf Your p.595
3) 3 types of leaf margins(select 3),
4) 3 types of leaf arrangements(select 3)
(http://www.csdl.tamu.edu/FLORA/201Manhart/Homepage.html)

Divide page in 4 equal quadrants!

Calendar - explanation of cuticle, xylem, phloem, guard cell, stoma, vein, upper epidermis, palisade layer, spongy layer, mesophyll, lower epidermis, five interesting facts

June

Divide page in thirds with 2 vertical lines!

Drawing - Roots - Types of Roots - Your text p.584
Cross section - Your text p.587
Longitudinal section Class text p.585

Calendar: -explanation of epidermis, cortex, endodermis, root hair, root cap, zone of elongation, zone of cell differentiation, zone of growth; five interesting facts

July

Divide page in half with a vertical line!

Drawing: Stems - 1)Cross section of monocot and dicot stem - Your text p. 590
2)Cross section of woody stem - Your text p. 591

Calendar: explanation of heartwood, sapwood, bark, pith, vascular bundle, stolon, tuber, succulent, five interesting facts

August

Divide page in half with a vertical line!

Drawing: Seeds - Monocot seed - Your text p.616
Seed germination Your text p. 621

Calendar: - explanation of endosperm, cotyledon, hypocotyl, epicotyl, seed coat, embryo, five interesting facts

September

Drawing: - Comparison of Monocots and Dicots – Your text p. 570

Calendar - three examples of monocots(pictures with names), three examples of dicots(pictures with names), five interesting facts

October

Divide page in half with a vertical line!

Drawing: Plant Nutrients/Hormones – (* You may make your tables on the computer for this month)
Chart of Plant Nutrients and Their Importance – Your text p.586
Chart of Plant Hormones: Type, Where Found in Plant, Uses - Your text p. 634-638

Calendar: Two interesting facts (not included in chart) about each of the following nutrients: nitrogen, phosphorus, potassium, magnesium, sulfur , two interesting facts(not included in chart)about each of the following hormones: auxins, cytokinins, ethylene, gibberellins

November

Drawing(Pictures) - Uses of Plants
* Show with pictures, drawings, graphics, etc. your knowledge of how plants are used in our daily lives (Food, Wood, and Medicines must be included!)

Calendar: - Fifteen facts about the uses of plants in our daily lives

December

For this month –you choose a topic related to plants that has not been covered in the previous 11 months and give drawings, pictures, or graphics related to it. Be sure to put the topic at the top or the "picture page". In the calendar give 15 facts about your topic

Possible topics:
Plant Adaptations
Plant Responses
Botany- related Careers
Gardening and Horticulture
Plant Tissue Culture
Vegetative Propagation
Hydroponics
Native Louisiana Plants/Flowers
Other Topics - See me for approval!