Name: _____

Date: _____

Science- Plants- Note Taking

A **seed** is a part of the plant from which a new plant can grow.

seed plant- a plant that can form new seeds.
Examples of seed plants: hibiscus, dandelion, pine tree.

non- seed plant- a plant without seeds.
Some non-seed plants **reproduce by spores** instead of seeds.
The spores are specially made to survive drought and harsh conditions.
Examples of the main groups of non- seed plants: algae/ seaweed, mosses, and liverworts and ferns.

Plans are divided into **TWO** groups called monocot and dicot.
monocot roots is called **fibrous root**.
dicot roots is called **taproot**.

Plants with Flowers and Plants with Cones

germination- when a tiny plant grows out of the seed.
Two groups of plants form seeds.

One group is plants that have **flowers**.
Flowers grow on bushes, tree or on small plants.
The **other group of seed- forming** plants are plants that have **cones**.
Cones grow on some evergreen trees such as pine trees, spruce trees, hemlock, cedar, etc.

Monocots and Dicots

All plants that produce flowers and seeds are called flowering plants. The seeds they produce have one or two food leaves called **cotyledons**. Flowering plants are grouped by the numbers of food leaves their seeds produce.

monocot (monocotyledon) **one** (single) food leaf
dicot (dicotyledons) **two** food leaves

monocot (monocotyledon) **- one** (single) food leaf
- leaf veins are **parallel**
-fibrous roots (roots grow randomly)
- stems are vascular bundles and **grow scattered**
- flowers grow in multiples of **three**.
Examples of monocots are: tulips, morning glory, grasses like wheat, rice and corn.

dicot (dicotyledon) **- two** food leaves
- leaf veins are **network**
-**taproots** (roots grow straight down)
- stems are vascular bundles that **grow in a ring**.
- flowers grow in multiples of **four** or **five**

Examples of dicots are: hibiscus, yellow elder and lignum vitae