A **dichotomous key** is a tool that allows the identification of organisms by answering a series of questions that lead the user on a path to the correct identification. Each question in the key provides two choices ("dichotomous"), each leading to further questions until the organism can be identified. The key below is a simplified version, and doesn’t consider all the characteristics that your plant may have. You may not always be able to see the characteristics required in the key. Do your best to look up additional information and avoid guessing in order to obtain an accurate determination.

**Dichotomous Key for Major Land Plant Groups**

1. Does your plant have true roots, stems, and leaves?
   * Yes? Go to **2**
   * No? You have a **bryophyte** (mosses, liverworts, and hornworts)
2. Does your plant produce seeds?
   * Yes? Go to **3**
   * No? You have a **fern or fern ally** (including horsetails and club mosses)
3. Are the seeds enclosed within a fruit?
   * Yes? You have an **angiosperm** (flowering plants). Go to **4**
   * No? You have a gymnosperm (including pines, firs, and cycads)
4. How many petals or sepals are present in each flower?
   * 3 or 6? You have a **monocot** (e.g., grasses, lilies, orchids)
   * 4 or 5? You have a **dicot** (e.g., beans, roses, daisies)

**Key Characteristics to Note:**

* **Bryophytes**: Lack true vascular tissue (xylem and phloem) and do not have true roots, stems, or leaves. They rely on diffusion for water and nutrient transport.
* **Ferns and Allies**: Have vascular tissue but do not produce seeds. Reproduce via spores.
* **Gymnosperms**: Have vascular tissue and produce naked seeds not enclosed in fruit. Seeds often found in cones.
* **Angiosperms**: Have vascular tissue and produce seeds enclosed in fruit. They are divided into monocots and dicots, based on the number of cotyledons, leaf vein patterns, flower parts, and other characteristics.
  + **Monocots**: Have one cotyledon, parallel leaf veins, floral parts often in multiples of three, and a fibrous root system.
  + **Dicots**: Have two cotyledons, net-like leaf veins, floral parts often in multiples of four or five, and a taproot system.