Primitive vs. Advanced

<u>Primitive</u> <u>Advanced</u>

Flower parts numerous (more than 10) Flower parts few (10 or less)

Flower parts free Flower parts united

Flowers hypogynous (ovary superior) Flowers epigynous (ovary inferior)

Flowers actinomorphic (radial symmetry) Flowers zygomorphic (bilateral symmetry)

Sepals are usually few, they may be free or united, and the calyx may be actinomorphic or zygomorphic.

Petals are usually few, they may be free or united, and the corolla may be actinomorphic or zygomorphic.

Stamens may be numerous or few, and they may be free or united by their filaments and(or) anthers. Stems are not usually considered for symmetry.

There may be numerous pistils, a few pistils, or only one pistil. If there are numerous or few pistils, they are simple (composed of one carpel each). If there is one pistil, it may be simple (composed of one carpel) or compound (composed of two or more united carpels).

If the sepals, petals, and stamens are attached below the ovary of the pistil, then the ovary is superior and the flower is hypogynous. If the sepals, petals, and stamens are attached above the ovary of the pistil, then the ovary is inferior and the flower is epigynous. Pistils are not usually considered for symmetry.