Many people use the word bulb as a type of “blanket term” to include tubers, corms and rhizomes.

Botanically speaking, they are not all the same. Actually the term “geophyte” refers to all of those different kinds of “bulbs.”

One thing that they do all have in common is that they are all underground storage units ready to come to life when the time is right. The energy for the plant to grow and flower is produced by the photosynthesis of the leaves. That is why it is important to not cut back the leaves after the plant is finished blooming. Those leaves need to have time to produce and store that much needed energy.
True bulbs are layered on the inside, much like an onion and most have a protective tunic layer covering the outside of the bulb. They have a basal plate from which the roots emerge and are usually round or egg shaped with a pointed end from which the leaves emerge.

Daffodils form new bulbs around the original bulb. These new bulbs are called offsets and they develop from buds from within the base of the original bulb to produce new plants. When these bulbs become overcrowded, their flower size decreases or they may not bloom at all. This is an indication that it is time to dig them up and divide them. True bulbs include daffodils, tulips and hyacinths.

Corms are solid stem bases. They are round and have a basal plate like a bulb, but are flatter in appearance. When corms become exhausted, they use energy from the growing leaves and stem to create a new corm. If you were to dig one up in the fall, you would find the spent corm, like a dried up prune, still clinging to the bottom of the new corm. Gladiolus, freesia and crocus all grow from corms.

Rhizomes are swollen stems that grow horizontally, just under the surface of the soil and sends up leaves and flowers at intervals. Plants growing from rhizomes include iris, lily of the valley and cannas.

Tubers are thick underground stems. They have no basal plate and some look like fat fingers, such as those found on dahlias and anemones. Daylilies also grow from tubers but they are long and slender. The potato is a tuber with leathery skin and numerous eyes which are the points from which plants grow.

Not all geophytes are hardy. Those non-hardy or tender varieties, such as gladiolus, begonias and dahlias have to be lifted from the soil in the fall, stored in a cool area and replanted in the spring.

As always, Happy Gardening!

Karen Weiland is an advanced master gardener. More information about gardening and related subjects is available online at hort.purdue.edu/ext/garden_pubs.html. The Purdue University Cooperative Extension Service can be reached at 499-6334 in LaGrange County, 636-2111 in Noble County, 925-2562 in DeKalb County and 668-1000 in Steuben County.