

GCSC GIRL SCOUT PATCH REQUIREMENT

NO. 4 HORTICULTURE

D LEARN THE DIFFERENCE BETWEEN BULBS, RHIZOME, CORM, TUBEROUS ROOT AND TUBERS

BULBS - BULBS HAVE AN UNDERGROUND STEM BASE CONTAINING AN EMBRYONIC PLANT SURROUNDED BY SCALES. A BASAL PLATE AT THE BOTTOM OF THE BULB HOLDS SCALES TOGETHER AND PRODUCES ROOTS. EXAMPLE - DAFFODIL, LILY, IRIS, HYACINTH, SNOWFLAKE.

RHIZOME - A RHIZOME IS A THICKENED STEM GROWING PARTIALLY OR ENTIRELY BELOW GROUND. ITS ROOTS GROW FROM THE UNDERSIDE. THE PRIMARY GROWING POINT IS AT THE END. EXAMPLES - BEARDED IRIS AND CALLA.

CORM - A CORM HAS A SWOLLEN UNDERGROUND STEM BASE, BUT IS COMPOSED OF SOLID TISSURE INSTEAD OF SCALES. ROOTS GROW FROM A BASAL PLATE AT THE CORM'S BOTTOM. THE GROWTH POINT IS AT THE TOP. EXAMPLES - GLADIOLUS, CROCUS, FREESIA.

TUBEROUS ROOTS - A TUBEROUS ROOT IS A TRUE ROOT, THICKENED TO STORE NUTRIENTS. FROM ITS SIDE AND TIP, FIBROUS ROOTS DEVELOP FOR THE UPTAKE OF WATER AND NUTRIENTS. TUBEROUS ROOTS GROW IN A CLUSTER WITH THE SWOLLEN PORTIONS RADIATING OUT FROM A CENTRAL POINT. TO DIVIDE, CUT THE ROOT CLUSTERS APART SO EACH PART HAS BOTH ROOTS AND A STEM. EXAMPLE - DAHLIA.

TUBERS - TUBERS LIKE CORMS ARE SWOLLEN UNDERGROUND STEM BASES. A TUBER HAS MANY GROWTH POINTS. SOME TUBERS INCREASE IN SIZE EACH YEAR. EXAMPLE - CALADIUM, POTATO, CYCLAMEN.