



Garlic or onion bulbs used in: New Plants, Plants and Animals

Background. Bulbs are most often found in the subterranean world along with roots, but are not roots themselves. A bulb is a short piece of stem with a bud at one end and roots at the other. Around the bud is a compact capsule of modified leaves. The leaves are thick with water, sugars, and starch. The aerial parts of the plant can die back completely at the end of a growing season, leaving the bulb underground to nourish and protect the bud that will produce next year's plant. Some bulbs, like onions, garlic, and shallots, start growing whenever moisture is provided. Others start growing only after they have been cold for awhile and then warm up. Such a triggering mechanism is essential to the survival of plants that live in areas that experience hard freezes during the winter. Bulbs that normally bloom in the spring can be induced to start their growth early, providing bright, fragrant flowers in the dead of winter. Fooling bulbs into growing early by putting them in the refrigerator for a few weeks in the fall is called forcing and is a common practice with hyacinths, tulips, and daffodils and their relatives.

Obtaining bulbs. Garlic and boiling onion can be easily purchased at a grocery store. Buy organic ones, if possible, as they will sprout more readily. Onion bulbs or sets can be purchased from a nursery for most of the year (September-February.) Yellow, white or red onions are fine.

What to do when the investigations are completed. Students can take home the sprouted bulbs to plant in a pot or garden. Any unwanted plants can be placed in the compost.