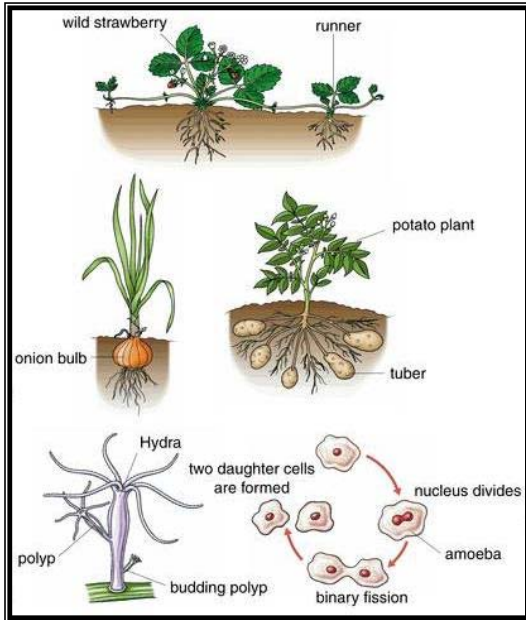
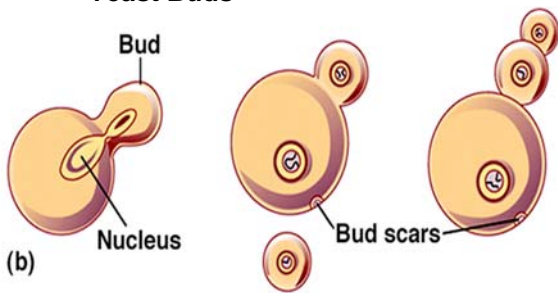


Asexual Reproduction

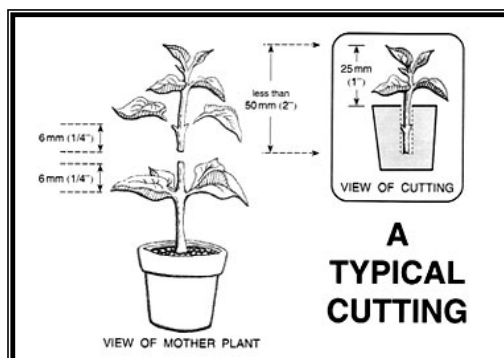
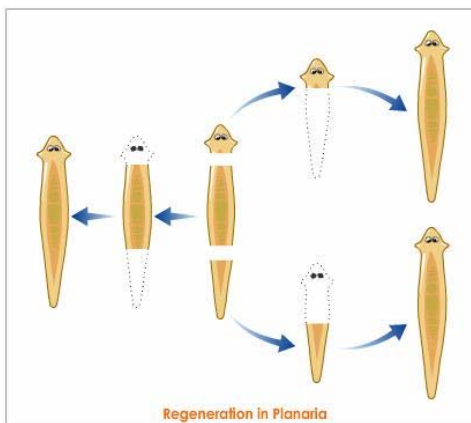
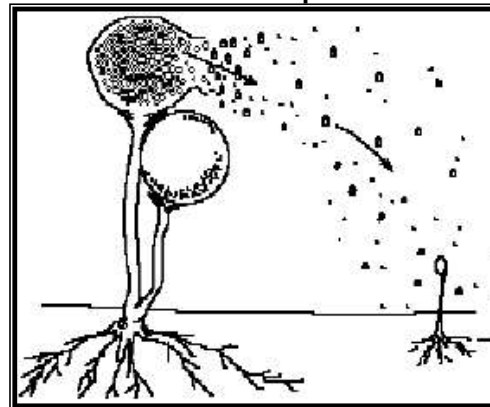
- ◆ **Binary Fission:** nuclear and cytoplasmic division is equal (ameba, paramecium)
- ◆ **Budding:** equal nuclear division, unequal cytoplasmic division
 - unicellular – yeast
 - multicellular – hydra
- ◆ **Sporulation:** spores produced are genetically identical to parent (fungi)
- ◆ **Regeneration:** the ability of an organism to develop a genetically identical organism from part of the parent organism (planaria, starfish) or to replace lost parts (lobster claw, lizard tail)
- ◆ **Vegetative Propagation**
 - bulb:** genetically identical plants grow from bulbs or underground stems (onions, tulips)
 - tuber:** also a type of underground stem. New genetically identical plants grow from the buds of “eyes” of the tuber (potato, yam)
 - runner:** plants have above ground horizontal stems that grow genetically identical plants along the stems (strawberry)
 - cutting:** a part of the stem is rooted and planted – will grow into a new genetically identical plant
 - graft:** when a cutting is inserted into a cut in another tree. The cutting will develop its own fruit – the host plant (stock) will continue to develop its own fruit. (cutting from a lime tree is matched to a branch on a rooted orange tree – the cutting still produces limes and the rooted tree still produces oranges).



Yeast Buds



Sporulation – fungi



Graft

