

Lesson 2.6: Asexual Reproduction

Types of Asexual Reproduction	Sample Organisms	Overview of the type of Asexual Reproduction
Binary Fission	• Amoeba • Protozoa • Bacteria • Algae	Occurs most often in prokaryotes. DNA is copied. One-celled organism (unicellular) divides into two identical daughter organisms.
Budding	• Hydra • Yeast • Sponges • Worts	• Starts with small growth on side of parent. • Bud grows and then breaks off from parent and continues to grow into a new organism.
Spores	• Mushrooms • Fungi • Algae (red tide for dinoflagellates) • Bracket mushroom • Puffball	• Spores found in gills of mushrooms • Need to be dry to move in wind • The spore remains until environment provides good growing conditions, then the spore grows into mature organism. Thick cell walls provide protection until conditions are optimal for growth.

Vegetative Propagation	• Potatoes (pg 58 c) (tubers are short underground stems) - Strawberries runners - Aspen shoots - daffodil bulbs	- When plants reproduce asexually • Root, stems (i.e, runners are horizontal stems), and leaves can grow into an independent plant. - Aspens send out shoots (underground stems) • Bulbs - each year new bulbs grow. E.g., tulips • Cuttings can be taken and can grow into new plant http://www.youtube.com/watch?v=fPraEesXRSs (video of sugar cane cutting)
Fragmentation	- sea stars - planaria	- small part of the animal breaks off and grows into a new organism - The fragment must contain enough genetic material to grow into a new organism. - Regeneration is when the missing body parts regrow. http://www.youtube.com/watch?v=k13zl4AJgBc (video on budding and Fragmentation)

Asexual reproduction is a mode of reproduction in which a new offspring is produced by a single parent

Characteristics of Asexual Reproduction:

1. Only one organism is required.
2. Quick (single organism can result in huge numbers of offspring)
3. All offspring are clones (i.e, genetically identical).

Assign: worksheet pages 14-16 from workbook