

Topic 3 - Passing It On

- Characteristics are passed on from generation to generation through the reproductive process. Some characteristics, or traits, are inherited through ...
 - waste matter
 - genetic material
 - cellular respiration
 - learned behavior
- There are different types of asexual reproduction: When the cell duplicates its contents, including its nucleus and other organelles and then splits into two cells with each one being identical (bacteria, amoeba, algae)

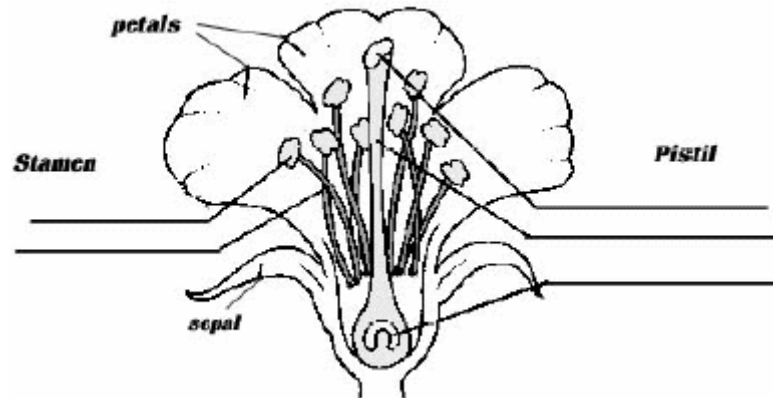


- only single-celled organisms reproduce in this way – it is

called ...

- budding
 - tuber formation
 - binary fission
 - spore production
- Spores are similar to seeds, but are produced by the division of cells on the parent, not by the union of two cells. Many spores are produced to ensure that at least some of the individual organisms will survive. Some fungi and green algae can also produce types of spores that move using tail-like flagella and are called ...
 - paramecium
 - flagella spores
 - pseudopods
 - zoospores
 - Plants continue to grow throughout their lives. The rapidly growing tips of roots and stems contain specialized cells called meristems that function in the process of ...
 - reproduction
 - transportation
 - photosynthesis
 - respiration
 - Coral reproduces (a smaller version of itself), a self-sufficient individual - identical to the parent, but do not detach themselves in the same way as other organisms do. This asexual reproductive process is called ...
 - cuttings
 - tubers
 - budding
 - grafting
 - Many organisms are capable of both sexual and asexual reproduction, like some moulds, such as *Rhizopus*, which produce spores. To reproduce sexually as well, they can also produce ...
 - angiosperms
 - zoospores
 - zygospores
 - gametes
 - A primitive form of sexual reproduction in which bacteria are able to transfer genetic material directly from one cell to another is called bacterial conjugation. Because there is no increase in the number of cells, it does result in genetic...
 - redistribution
 - recombination
 - reconstitution
 - recovery

Sexual reproduction in plants involves male gametes and female gametes joining, during fertilization, to produce a zygote and then an embryo.



8. The stamen part of the flower is the ...
 - A. male gamete
 - B. female gamete
 - C. zygote
 - D. embryo

9. Plants which are not identical to either parent are produced as a result of ...
 - A. zygote growth
 - B. cross-fertilization
 - C. embryo development
 - D. self-pollination

10. The pistil is composed of the following flower parts ...
 - A. ovary, filament, stigma
 - B. stamen, stigma, ovary
 - C. anther, ovary, stigma
 - D. stigma, style, ovary

11. Most plants that produce seeds can also reproduce asexually. Mosses produce egg and sperm cells in the later part of the life cycle and in the early part of the same life cycle produce asexual
 - A. gametes
 - B. cuttings
 - C. spores
 - D. buds

12. During mating, the male gamete cell and the female gamete cell unite to form a fertilized combination of cells which are the first of many cells of a new individual called a ...
 - A. zygote
 - B. embryo
 - C. sperm
 - D. egg