

Asexual Reproduction Worksheet

Reading to Learn - Asexual Reproduction

Binary fission is the simplest method of reproduction. In binary fission, a parent cell splits in half and produces two new cells. During another type of asexual reproduction, an organism grows a bulge, which eventually breaks off the parent cell. This method is called budding.

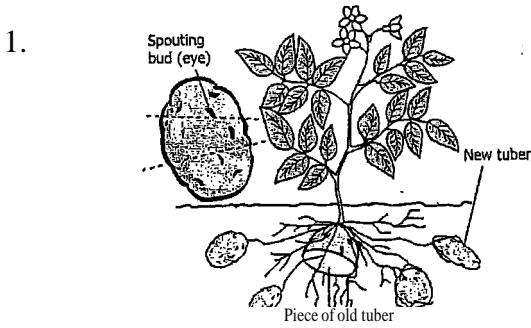
Have you ever seen a potato with small, green buds growing on the outside of it? Potatoes have small spots called "eyes" which can bud and grow into an entirely new plant. The potato itself is an underground stem or tuber that stores food. Cutting up and planting pieces of the potato with eyes can produce new potato plants. Other vegetables, like onions and garlic, can grow new green shoots from bulbs at the top of the stem. Some plants, like strawberries and grasses, grow runners that can sprout shoots and roots to produce new plants. Growing a new plant from a piece of a plant is called vegetative propagation and is similar to yeast reproducing by budding. Both types of asexual reproduction require only one parent and produce offspring that are exactly like the parent.

Another type of asexual reproduction is called regeneration. Regeneration allows an organism to grow back parts that may become missing or worn away. Some organisms can generate a whole new organism from just one part

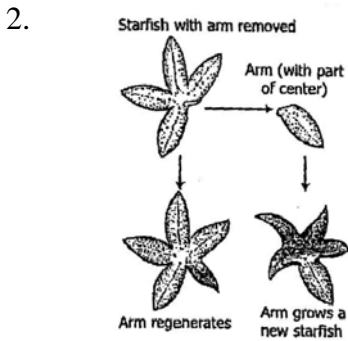
Activity

Use the diagrams on the back of this sheet to complete the chart below.

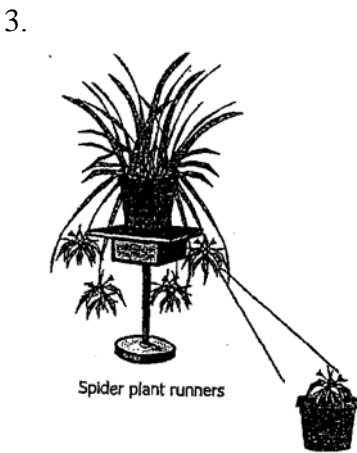
| Diagram | Name of Organism | Type of Asexual Reproduction | Number of Parents Involved |
|----------------|-------------------------|-------------------------------------|-----------------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |



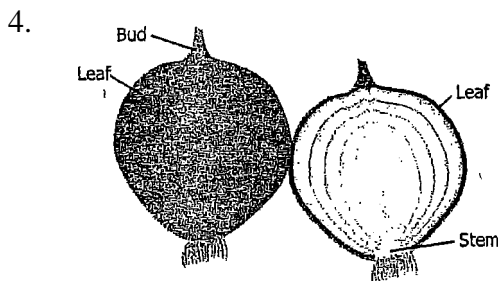
A white potato is covered with "eyes" or a bud is buried in the soil. The eyes grow into new potato plants.



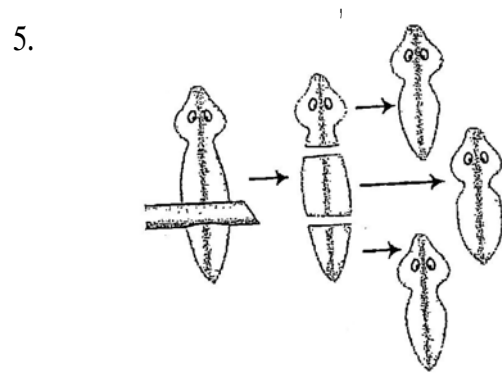
A whole new starfish can grow from a single arm that was cut off of a starfish.



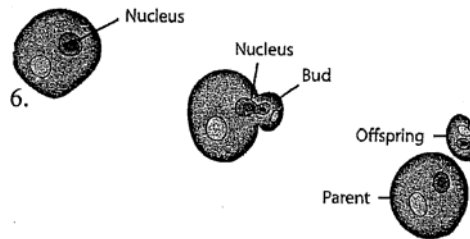
A spider plant sends out stems that have buds that grow into new spider plants.



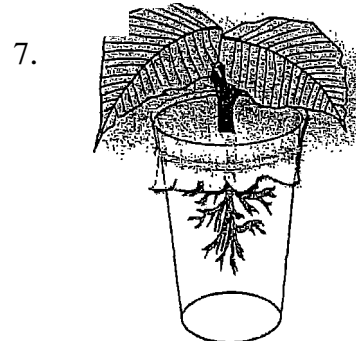
An onion grows from a short, thick underground stem called a bulb.



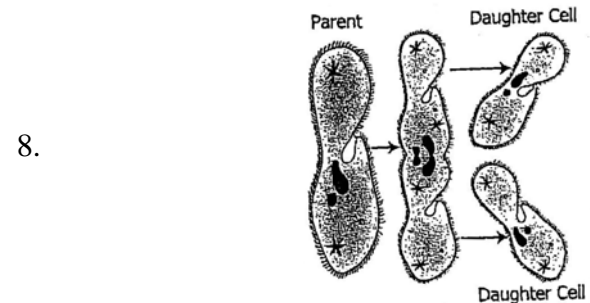
A planarian is a tiny flatworm that lives in ponds. If a planarian is cut into pieces, each piece will grow into a new planarian.



Yeast are one celled organisms that produce offspring from a bulge that forms and breaks away from the parent.



An ivy plant will reproduce a whole new plant if a piece of stem and leaf is placed into water or soil.



A paramecium is a one celled organism that reproduces by splitting in half to become two new cells.