

Intervention: Reproduction and Cells

In this activity you will draw cells from two organisms that undergo different types of reproduction. Asexual reproduction occurs when animals can either divide in two to form two new individuals or a part of their bodies can grow into a new organism. Some asexual reproduction occurs in plants that produce **spores**, which are produced during mitosis, or simple cell division.

Sexual reproduction requires cells from two organisms which combine to form the new offspring. The cells required are called egg and sperm and are produced in specialized reproductive organs in a process called meiosis.

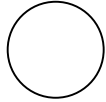
In this activity you will see how sexual and asexual reproduction are alike and different.

Analysis:

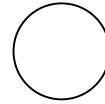
1. What is an organism that reproduces asexually? Sexually?
2. How are the two processes alike?
3. How are they different?
4. How does meiosis produce an organism with all 46 chromosomes when sperm and egg cells only have 23?
5. Why do you think meiosis sometimes called “reduction division”?

Draw the two pathways beginning with a cell. This does not need to be colored and can be a simple representation of each phase.

Mitosis



Meiosis



Sexual

Asexual

