Reproduction and Cells

Summary

In this activity students will understand how sexual and asexual reproduction are alike and different.

Main Core Tie

Science - Biology
Standard 4 Objective 1

Time Frame

1 class periods of 60 minutes each

Group Size

Individual

Materials

"chromosomes" made from 8 strips of paper of 4 different colors. Two color pair should be the same length but different from the other pairs.
Colored pencils are optional

- Venn diagram handout
  (attached)
- student worksheet
  (attached)
- illustration for overhead
  (attached)

Background for Teachers

In this activity students will draw cells from two organisms that undergo different types of reproduction. Asexual reproductions 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 mitiosis, 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.

Instructional Procedures

Make an overhead of the two pathways illustration attached.
Students will model the cell division on their desks and then draw it on their student worksheet. Explain to them how to place the chromosomes and make their drawings as you go. If you have colored pencils, have the students use them for the chromosomes.
The students will then answer the questions and complete the Venn Diagram.

Extensions

For Homework:

Find or make sets of chromosomes (see materials) Explain and show an adult and a peer (someone around your age) how mitosis and meiosis look, using your materials. Have them sign below to indicate you explained and showed it carefully.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

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