Student Page

Name:

Title: Asexual Reproduction Lab

Introduction:

Cloning plants can be a relatively simple process. Cloning is the process of asexually producing a group of cells (clones), all genetically identical, from a single ancestor. In this case you will use one single ancestor (this spider plant) and asexually produce several genetically identical offspring.

Prediciton

1. How long do you think it will take for asexual reproduction to occur in a spider plant?

Procedures:

- 1. Cut a baby off the spider plant with 5 cm of stem attached.
- 2. Carefully place stem of the plant into a cup of water.
- 3. Label and date the cup.
- 4. Place the cup on a well-lit shelf, in a room with proper ventilation.

5. Check daily for any signs of mold (changes in smell, water color, decay of plant). If signs of mold are present, discard the plant.

- 6. Completely change the plants water weekly.
- 7. Record periodic findings in a journal or data table.
- 8. Plant when roots have formed.

Date	Picture	Observations

Data:

Analysis:

1. What type of reproduction did this spider plant undergo?

2. How will the DNA and genetic information of the daughter plants compare to the DNA and genetic information of the parent plant?

3. Why would asexual reproduction be beneficial to these plants?

- 4. When might sexual reproduction be beneficial to these plants?
- 5. What are some variables that could be changed for this lab?
- 6. Write a hypothesis for changing one of those variables.

Conclusion: (Write a complete paragraph describing what you learned about asexual reproduction and plants through this lab.)