(Copy the following lab activity set up in your science notebook.)
Title: Activity 15 Meiosis
Challenge Question: How do cells divide for sexual reproduction?

## Background:

How is genetic material organized in a cell?
What happens to the genetic material before a cell divides by mitosis?

## Vocabulary:

| Term | Definition | Picture or Example |
| :--- | :--- | :--- |
| homologous |  |  |
| chromosomes |  |  |
| meiosis |  |  |
| mitosis |  |  |

## Materials:

Cells and Heredity book

## Procedures:

1. Read pages 100-107 in Cells and Heredity book. Create notes from reading using Cornell note-taking format.
2. Answer questions 6, 7, 9, and 12. Write answers in Data/Results section in science notebook activity set up.
3. Do Lesson Review on page 109 questions 1-10. Write answers in science notebook set up in Data/Results section.

## Data/Results:

(Write answers to book questions here.)

## Analysis Questions:

1. Why do you think sexual reproduction requires meiosis? Why might getting genetic information from each parent benefit the offspring?
2. Compare and contrast meiosis I and meiosis II.
3. Describe the cells that are produced following mitosis and meiosis.

Conclusion: How do cells divide for sexual reproduction? Use data, evidence and examples from the reading to support your answer.
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