

# CHAPTER 9

## The Cellular Basis of Inheritance

### Online Activity Worksheet 9.1

**All cells come from cells.**

*Analyze cell division.*

**OBJECTIVE:** to observe and analyze cell division in action

New cells can only come from the division of existing cells. In this activity, you will observe the creation of new cells from existing cells. You will see that the addition of new cells causes the organism to grow, or, in the case of a one-celled organism, that a new cell becomes a new individual.

Click on the images to watch the formation of new cells.

Now answer the following questions in the spaces provided.

1. How are the growth of the root tip and the roundworm (*C. elegans*) similar?

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2. How is the fission of the paramecium (*P. caudatum*) similar in function to the growth of the root tip and roundworm? How is the fission of the paramecium different in function from the root tip and roundworm?

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