Heredity and Adaptation
Teaching Slides, 3.3
Discuss evolution and time

1. How long did it take for the first terrestrial tetrapods to evolve from fish?
2. Can you think of any organisms that might evolve even more quickly than that?
3. What information do humans now have that can help them influence organisms today?
Focus question

- How are humans influencing inheritance?
Influencing Evolution

Humans are the only organisms that have the ability to use technology to influence inheritance. For more than 10,000 years, humans have affected the inheritance of plants and animals. They have made useful traits more common. Humans have changed the genetic makeup of other organisms in several ways. These brief descriptions will help you choose one method or technology to study further.

Genetic research explores a wide range of issues with important health implications and ethical challenges. Current topics include stem cell research, DNA profiling, inheritance patterns, and the genetics of infectious diseases.
As we read, write a short description of each genetic technology in your notebook.

Your group will choose one technology to research.
Notebook sheet 20, Genetic-Technology Project
“Genetic Technology Resources” online activity

Make sure each of you prepares a group information card, summarizing the technology in 25 words or less. You will take this to your focus group.
Research

Teacher master II, *Solving Problems Using Genetic Technology*
Focus groups

Move to focus groups. Take your information card with you.
Focus groups

Teacher master JJ, Focus Group Recommendations

Consider each problem and choose the genetic technology your focus group feels is most appropriate to solve the problem. Be prepared to make a recommendation to the class.
Review vocabulary

Spend a few minutes reviewing the vocabulary for this part. Update the vocabulary index and table of contents in your notebook.
Answer the focus question

• How are humans influencing inheritance?
Wrap-Up

Review your notebook entries for the course.