

AP Biology
Chapter 21 Guided Reading Assignment

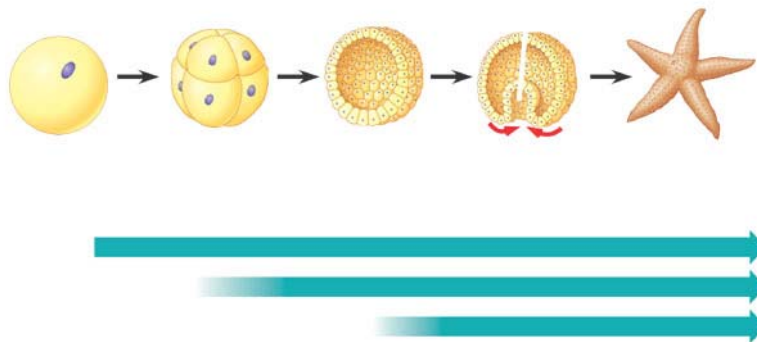
Name _____

We will be covering chapter 21 “lightly” – use this guided reading assignment as a roadmap to the topics that we will focus on.

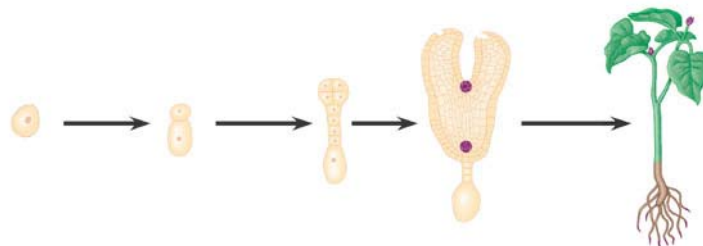
Chapter 21

1. What is meant by the phrase “model organisms are representative groups”?
2. Define the following terms:
 - a. Cell differentiation
 - b. Morphogenesis
 - c. Apical meristems
3. Use the unlabeled diagram to contrast stages of development in plants and animals.

(a)

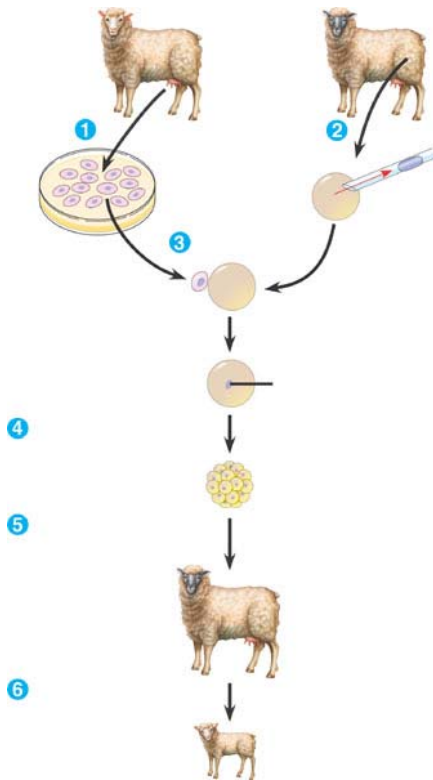


(b)



4. What is meant by the statement that an organism has genomic equivalence?
5. What does totipotent mean?

6. Label the steps in the diagram below that accomplished reproductive cloning of a mammal by nuclear transplantation.



7. What are some of the problems associated with animal cloning?

8. Define the following:

- Stem cell
- Pluripotent

9. What is apoptosis and why is it important in development?

10. What is a chimera?