Natural Selection Test Review

1. What is Natural Selection?
2. Study Darwin’s finches. What causes the distinctions in beaks?
3. What does a phylogenetic tree show?
4. Use embryology to determine which vertebrate body is the most closely related; a human, pig, monkey, salamander, or chicken?
5. What is another word for a fertilized egg?
6. What are homologies?
7. What is a species?
8. What is a vestige?
9. What is DNA, where is it located in the cell?
10. What is the difference between a genotype and a phenotype?
11. A mouse with 2 grey fur alleles mates with a mouse with 2 black fur alleles. Black is dominant. What color will the offspring be? Will they be heterozygous or homozygous?
12. If a person has down syndrome, how many chromosomes does he or she have and on what homologous pair does it show up?
13. What type of cell division is responsible for growth and repair and creates identical daughter cells?
14. During which phase of cell division do cells spend the majority of their time? What are they doing during this phase?
15. What is the purpose of meiosis?
16. How do yeast cells reproduce? Is this sexual or asexual? Mitosis or meiosis?
17. List the phases of mitosis in order.
18. What is a genetically modified organism?
19. What is a stem cell?
20. What is the primary goal for stem cell research.

**Short answer & Diagramming**

Correctly filling out punnet squares.

Explain the pros and cons of genetically modifying our food. Do you think that it should continue, why or why not. Give at least 3 valid arguments for or against your case.