

LATG - Quiz #4 (Ch. 8, 9)

1. Two Japanese Snow monkeys have the same genotype for red face color. However, only one monkey has a red face. What term is used to describe the proper functioning of the genes in the monkey with the red face?
 - a. Mutant
 - b. Clone
 - c. Wild-type
 - d. Anomaly
2. Transportation of information from DNA to the cell via messenger RNA is a process known as _____.
 - a. Replication
 - b. Transcription
 - c. Translation
 - d. Translocation
3. Which organelle acts as the decoding machinery of the cell in the process of translation?
 - a. Ribosome
 - b. Golgi Apparatus
 - c. Mitochondria
 - d. Cytoplasm
4. During the process of translation, mRNA is read in groups of three. These groups of three are referred to as _____.
 - a. Codons
 - b. Clones
 - c. Constructs
 - d. Complexes
5. What does the acronym PCR stand for?
 - a. Polyclonal Chemical Reaction
 - b. Polymerase Chain Reaction
 - c. Polymer Constructed Region
 - d. Polyclonal Cloning Registration

6. A number of different test mechanisms are used to detect the presence of DNA, RNA, and protein in a biological sample. _____ is used to test for the presence of RNA, _____ is used to detect DNA, and _____ is used to detect for the presence of protein.
- Southern blot, Northern blot, Western blot
 - Northern blot, Southern blot, Western blot
 - Western blot, Southern blot, Northern blot
 - Southern blot, Western blot, Northern blot
7. What technique is the most widely used method for production of transgenic mice?
- Blastocyst injection
 - Embryonic transfer
 - Targeted mutation
 - Pronuclear microinjection
8. What is another name commonly used to refer to “targeted mutation” mice?
- Knockout
 - Surrogate
 - Pseudotransgenic
 - Embryonic
9. What is the term used for injecting donor female mice with 2 hormone injections that causes them to release additional eggs?
- Superovulation
 - Synchronization
 - Microinjection
 - Pseudopregnancy
10. Which of the following best defines the term “totipotent”?
- An unsuccessful knockout mouse
 - Cells carry a new gene that was not anticipated
 - A cell that overexpresses a protein from a new gene
 - A cell is capable of becoming any type of body tissue