

問答題，每題十分

1. Describe the fluid mosaic model of membrane structure.
2. Distinguish among sympatric, allopatric, and parapatric speciation.
3. Name the process in which most of the energy from glucose is converted to ATP.
4. What advantages do C₄ plants have over C₃ plants? Why don't C₄ plants take over everywhere? What limits them?
5. What causes Down syndrome and other forms of aneuploidy? Why should the frequency of aneuploid eggs increase as a mother ages?
6. What kinds of proteins help RNA polymerase recognize the right promoter? What is a promoter?
7. What is a retrovirus? How does it differ from other RNA viruses?
8. What is a Prion (proteinaceous infectious particle)? How does it differ from other infectious agent?
9. If the cloning Dolly was cloned from a stem cell, rather than a fully differentiated udder cell, what are the consequences of that fact, both practical and theoretical?
10. Name the eight peptide hormones released by the anterior pituitary in human and tell what each one does.