Feedback — Quiz 2: Measurement Technology

Authentication is not required for this quiz.

You submitted this quiz on **Mon 3 Aug 2015 10:28 PM PDT**. You got a score of **10.00** out of **10.00**.

Question 1

Genome assembly refers to

Your Answer		Score	Explanation
○ A computational process to translate highlevel code into machinelevel instructions			
○ A computational method to identify the genes being expressed in a cell or tissue			
⊙ A computational method for reconstructing chromosomes from short reads	✔	1.00	
○ A method for capturing gene sequences			
Total		1.00 / 1.00	

Question 2

Which of the following is not true about DNA?

Your Answer		Score	Explanation
○ Each strand has a direction			
○ DNA molecules can be millions of bases in length			

⊙ It doesn't matter which direction you write the sequence in   ✔   1.00

◯ One strand is complementary to the other

Total   1.00 / 1.00

Question 3

RNA molecules are translated into

Your Answer		Score	Explanation
⊙ Proteins	✔	1.00	
◯ Exons			
◯ DNA molecules			
◯ Introns			
Total		1.00 / 1.00	

Question 4

Messenger RNA is

Your Answer		Score	Explanation
◯ A shortened version of DNA			
◯ A reverse copy of DNA			
◯ A special signal that helps a cell communicate with other cells			
⊙ A template from which proteins are constructed by ribosomes	✔	1.00	
Total		1.00 /	

Question 5

DNA is copied into DNA in order to

Your Answer		Score	Explanation
⊙ Replicate a cell	✔	1.00	
◯ Respond to an infection			
◯ Create species diversity			
◯ Encourage evolutionary changes			
Total		1.00 / 1.00	

Question 6

Evolutionary biology involves the study of

Your Answer		Score	Explanation
◯ How the cell membrane is formed			
⊙ The process of natural selection that allows some DNA mutations to survive and cause others to die out	✔	1.00	
◯ The origin of the very first living organisms			
◯ The purpose of life on earth			
Total		1.00 / 1.00	

Question 7

Which of the following can we measure with next generation sequencing?

Your Answer		Score	Explanation
⚪ Protein levels			
🔘 DNA variants	✔	1.00	
⚪ RNA secondary structure			
⚪ Protein transport rates			
Total		1.00 / 1.00	

Question 8

What is the first step in ChIP-sequencing to measure protein-DNA binding?

Your Answer		Score	Explanation
⚪ Antibody pulldown of the linked proteinDNA fragments			
⚪ Sequencing the bound DNA fragments			
⚪ Fragmenting the DNA			
🔘 Cross-linking proteins to the DNA	✔	1.00	
Total		1.00 / 1.00	

Question 9

Which of the following can be measured using bisulfite conversion and then sequencing?

Your Answer		Score	Explanation

○ DNA-protein binding

◉ DNA methylation   ✔   1.00

○ Transcription-factor binding

○ DNA secondary structure

Total   1.00 / 1.00

Question 10

What is the primary measurement technology used in most modern genomics experiments?

Your Answer	Score	Explanation
○ Polymerase chain reaction		
○ Western blotting		
○ Nanopore sequencing		
○ Oligonucleotide arrays		
○ Sanger sequencing		
◉ Next generation sequencing	✔ 1.00	
Total	1.00 / 1.00	