DNA: Playing God

Episode 2 Video Questions

1) T or F … Genetic engineering allows humans to accelerate evolution according to their own design and alter the destiny of life on earth.

2) What make ideal experimental subjects because they are simple and breed rapidly?

3) Herb Boyer and Stan Cohen were the first to use _______ to cut _______.

4) They then inserted a gene from a _______ into a bacteria.

5) When it was proposed that someone try putting a cancer gene into the *E. coli* bacteria for experimentation, what was the main concern?

6) T or F … The point of the conference was safety, but the result was a great increase in interest regarding genetic engineering.

7) Who did Sidney Brenner use to test the safety of his experiment?

8) In 1978 in Chicago, a law determined whether living things could be patented based on a case about bacteria that could eat _______ after a spill.

9) Bob Swanson and Herb Boyer created a company called ________, which was the first commercial genetic engineering company.

10) Scientists next wanted to manufacture drugs by inserting human _______ into bacteria and they wanted to start with the gene for _______.

11) T or F … The only way to get the human insulin gene is to harvest it from the tissue of a person.

12) Gilbert’s team found an insulin gene from a _______.

13) During the 1980’s the main focus of genetic engineering was drugs, but then there was a shift to genetically modifying _______ for food.

14) The first field tests of genetically modified food were conducted in 1987 with the planting of a field of what crop?

15) Monsanto is trying to find a protein that will kill insect larvae before they _______.

16) T or F … Monsanto is also trying to engineer plants that can create plastics.

17) One mistake that the companies have made is that they only show improvements for the farmer, but the consumer sees no immediate _______.

18) As biologists attain a deeper understanding of DNA the future _______ of plants and animals will be within their grasp.