Bozeman on Mutations : <https://www.youtube.com/watch?v=eDbK0cxKKsk>

1. DNA mutations ….

1. Are changes in the DNA sequence.
2. Always cause a change in the protein sequence.
3. Are bad and so never inherited.
4. Are the result of cancer.

2. Which mutation has the most affect…

1. A mutation in the DNA sequence inside the gene sequence
2. A mutation in the DNA sequence outside of the gene sequence
3. A mutation in in the mRNA sequence for a protein
4. a non-functional ribosome inside of a cell

3. Mutations ….

1. are always bad.
2. are always good.
3. can be good or bad.
4. none of the above.

4. A common cause of induced mutations are….

1. UV light
2. Cigarette smoke
3. Benzo-pyrene
4. all of the above

5. A point substitution Mutation

1. changes whole regions of DNA
2. changes a single DNA Nucleotide
3. always results in a change in the protein
4. does not affect the mRNA sequence

6. The function of several enzymes is to fix the mistakes made by a substitution reaction. This process is…

1. 100% efficient
2. 0% efficient
3. 75% efficient
4. 50% efficient

7. If DNA is lost the mutation is called

1. A substitution Mutation
2. A deletion Mutation
3. An insertion mutation
4. A translocation mutation

8. If DNA is gained the mutation is called

1. A substitution Mutation
2. A deletion Mutation
3. An insertion mutation
4. A beneficial mutation

9. Large scale mutations include Deletions, point mutations, duplications, and inversions. (T/F)

10. Mutations that occur during Mitosis are always inherited. (T/F)

**1. a**

**2. a**

**3. c**

**4. d**

**5. b**

**6. d**

**7. b**

**8. c**

**9. F**

**10. F**