

1. When Mendel crossed tall pea plants with short dwarf plants, the products of that cross were all hybrids; the phenotypes of those hybrids were:

- A. All tall B. All medium in height C. All short D. 3:1 tall to short

2. From experiments like this, Mendel concluded that:

- A. Every individual has two factors for each physical characteristic
 B. One factor for each physical characteristic comes from the mother, one from the dad
 C. The individual can pass on only one of the two factors to each offspring
 D. The chances of an offspring getting the one from grandma is 50/50
 E. One factor can be strong (dominant) and hide the other factor (weak or recessive)
 F. All of these are true

6 points: MATCH the name to the deed:

- | | | | | |
|----------------|---------|---------|-------------|--------|
| Charles Darwin | Erasmus | Fitzroy | Wilberforce | Huxley |
| Gregor Mendel | Beagle | Lamarck | Wallace | Mayr |

- _____ proved that inheritance was not blending but rather was particulate
 _____ published *Origin of Species* in 1859
 _____ scientist grandfather of Charles Darwin who wrote poems about evolution
 _____ name of the ship that took Darwin to the Galapagos
 _____ captain of that ship
 _____ Darwin's bulldog, the anatomist who defended him in debates
 _____ Bishop who argued against evolution
 _____ believed that changes in your body during your lifetime get passed on to your children
 _____ author of two articles that were assigned to you
 _____ thought of Natural Selection independently of Darwin at about the same time

2 points Think of the evolution of the long neck in giraffes; tell me how Darwin's explanation was different from Lamarck's. Consider the pattern of evolution and the mechanisms that each used to explain change over time.

Print Name _____

BONUS: what is the difference between Genotype and Phenotype?