Assignment:\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour:\_\_\_\_\_

**Gregor Mendel – 1822-1884  
The Father of Genetics**

**Gregor Mendel**

* Austrian monk
* Studied the \_\_\_\_\_\_\_\_\_\_\_\_ of traits in \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_
* Developed the \_\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Mendel’s work was not recognized until the turn of the \_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Between 1856 and 1863, Mendel \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ thousands of \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
* He found that the plants’ \_\_\_\_\_\_\_\_\_\_\_\_\_ retained traits of the \_\_\_\_\_\_\_\_\_\_\_\_\_

**Particulate Inheritance**

* Mendel stated that physical traits are inherited as “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”
* Mendel did not know that the “particles” were actually \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_

**Why Peas?**

* Can be \_\_\_\_\_\_\_\_\_\_ in a \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_
* Produce \_\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Produce \_\_\_\_\_\_\_\_ plants when allowed to \_\_\_\_\_\_-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ several generations
* Can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mendel and His Peas**

* Mendel tested 7 traits:



* Mendel crossed flowers that were true breeding for each characteristic
* He crossed a purple (\_\_\_\_\_) flowered plant with a white (\_\_\_\_\_) flowered plant (\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)
  + The first generation (\_\_\_\_\_) of plants all had purple flowers
  + Mendel took two of his first generation (\_\_\_\_ x\_\_\_\_) purple flowered plants and crossed them together
  + In the second generation (\_\_\_\_) he had 3 purple flowered plants, and 1 white flowered plant
* Mendel noticed in the first generation, all of the white flowered seemed to disappear
  + He called this a \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_
  + The white color faded into the background at first, then it showed up in the next generation when he pollinated the flowers
* The color (purple) that seemed to mask over the recessive color was named the \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

**Mendel’s Conclusions**

1. **Law of Independent Assortment** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_ trait had \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_ trait
   1. When he crossed two plants with different traits (flower color and pea shape) he found the inheritance of one trait \_\_\_\_ \_\_\_\_\_ influence the inheritance of the other
2. **Law of Segregation** – \_\_\_\_\_\_\_\_ of a gene \_\_\_\_\_\_\_\_\_\_\_\_\_\_ during \_\_\_\_\_\_\_\_\_\_\_ and each \_\_\_\_\_\_\_\_\_\_\_\_ receives only \_\_\_\_\_ \_\_\_\_\_\_\_ for \_\_\_\_\_\_ \_\_\_\_\_\_\_\_

**Mendel Snapchat Assignment: If Gregor Mendel were to send a snapchat, what would it be?**

This assignment is fairly open ended, be creative… you need to **post a snapchat** that Gregor Mendel may have sent on our edmodo small group page (I’ll show you how in class) and **explain in 1-2 sentences why you chose what you did**. Your snapchat should be some kind of image… something you took, someone dressed up as Gregor, something that has to do with Mendel, an image you created etc. The most creative snapchat submitted on time with receive extra credit!

**Your Snapchat/Sentences MUST be posted on edmodo (on the small group page) by Monday, March 17th at 3:00PM to be considered on time!**