Name: _____ Date: _____

Mendel's Ideas

Instructions: Discuss with your group the ideas Gregor Mendel came up with for why a trait that is present in one parent might seem to disappear in the offspring of the first generation and then reappear in the offspring of the second generation. Compare Mendel's ideas with our class chart of ideas about inheritance from lesson 1.

Place a **GREEN DOT** next to ideas that appear on **both** Mendel's list and the class chart. Place a **BLUE DOT** next to ideas that appear on Mendel's list but **DON'T** appear on the class chart.

Green Dots	Blue Dots	Mendel's Ideas
		1. Individuals* receive trait instructions from their parents. Mendel called these instructions **factors**. Today we call them **genes**.
		2. Genes can have different forms. These different forms provide instructions for variations of a trait; for example, the set of instructions that results in purple flowers is different from the set of instructions that results in white flowers. These different forms of a gene are called **alleles**.
		3. Individuals get one variation of a gene (allele) from each parent, which means that each individual has two alleles for each trait.
		4. Which of the parent's two alleles an individual inherits is a matter of chance.
		5. If an individual inherits the **same** allele from each parent—like two alleles for purple flowers—that trait will show up.
		6. If an individual inherits a **different** allele from each parent, only one of the traits will show up.
		7. When an individual inherits two different alleles, the trait that shows up is called a **dominant trait**. The trait that doesn't show up is called a **recessive trait**.

*Mendel's ideas apply only to species of living things that reproduce **sexually**. Some living things reproduce **asexually**, meaning they have only one parent and are an exact copy, or clone, of the parent.