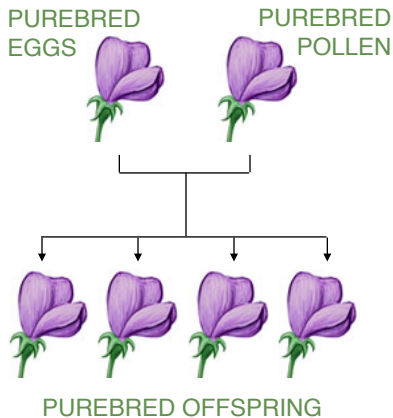


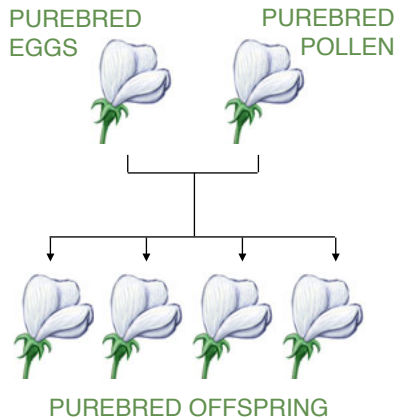
Mendel's Experiments

To begin with, Mendel carefully chose parent plants that were “purebred” for the **traits** he was focusing on. A purebred plant that self-pollinates (or two plants that are purebred for the same **trait**) will always produce **offspring** with the same **trait**.

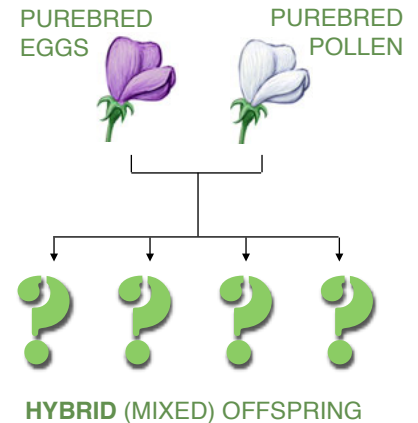
For example, a purebred purple-flowering pea plant that self-pollinates always produces purple-flowering **offspring**.




And a purebred white-flowering pea plant that self-pollinates always produces white-flowering **offspring**.



But Mendel decided to see what would happen if he cross-pollinated a purebred purple-flowering plant with a purebred white-flowering plant.



 Discuss the following questions with a partner and write down your answers.

1. What is the difference between self-pollination and cross-pollination? Explain in your own words how Mendel prevented the self-pollination of his pea plants, and why.

2. What would you guess happened when Mendel used pollen from a purebred purple-flowering pea plant to pollinate a purebred white-flowering pea plant? (Use the theories from the rabbit breeding discussion in the Reader's Theater to explain your guess.)
