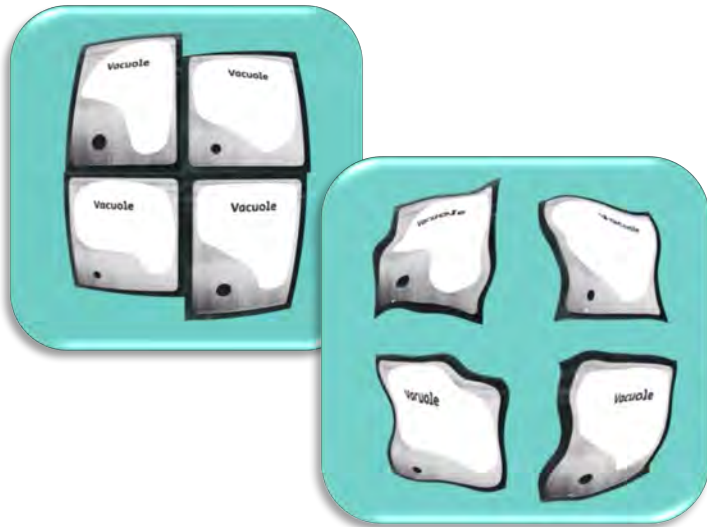


## Station 4:

# *What makes apples crisp?*



### **Cultivar**

*A plant variety that has been produced by selective breeding containing specific characteristics.*

Fruit breeding programs have developed many well-known apple cultivars. For example, the **Honeycrisp**, was introduced by the University of Minnesota in 1991.

The crispness of an apple can be explained by evaluating the cells of the apple. The cells of the Honeycrisp are larger than other apples and contain large vacuoles and pockets of sugar. When you bite into the apple, the cells burst open releasing the juices inside. In other apples like the Red Delicious, the cells are smaller and do not burst open when you bite into them.

1

Watch the video,  
*"Have We Engineered  
the Perfect Apple?"*



2

Answer the Challenge Questions on your  
handout.

3

Apple taste test:  
Compare the Red Delicious and the  
Honeycrisp apple.