

Station 3:

What changes apples from a solid to a liquid?



Food Processing

*The
transformation of
foods from one
form (raw) into
another.*

Apples are made up of 85% water and 10% sugar. How do you think *temperature* and *time* can be used to create a “sauce” or liquid version of apples?

The main difference between the solid and liquid phase of an apple is due to the amount of energy and the arrangement of molecules. Solids have tightly bound molecules that vibrate due to their packed nature and lower energy. Liquids have freely moving atoms and a higher energy state than solids. Explore the difference between liquids and solids by making applesauce!

1

Browse the
[Guide to the Most Popular Varieties](#)



While there are thousands of varieties of apples throughout the world, these 10 are the most prevalent in the United States. What characteristics make an apple ideal for different uses?

2

Answer the Challenge Questions on your handout.

3

Applesauce taste test.