

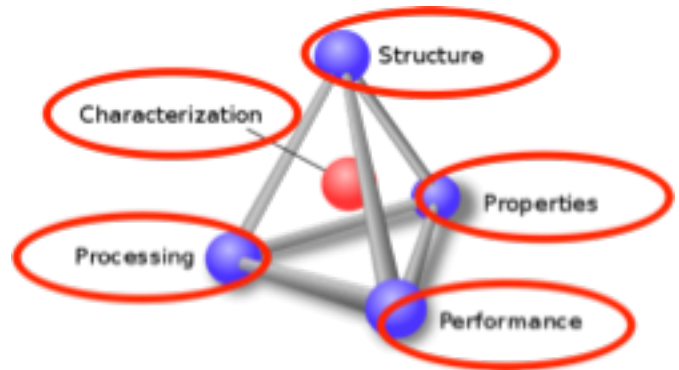
## You Should Be Able to:

Explain how different combinations of cocoa solids and cocoa butter affect the properties of chocolate

Explain how different quality of chocolate is related to ingredients and processing

## Pre Lab

1. The process of making chocolate fits into all categories of the tetrahedron. Explain why this activity fits into those categories.



2. How does the cooling rate affect the texture of the chocolate?



# Materials Science of Chocolate

## What You Need:

One piece of each:

- White Chocolate
  - Lindt White Chocolate (0%)
- Milk Chocolate
  - Hershey's Milk (~12%)
  - Ghirardelli Milk (~11%)
  - Scharffen Berger (41%)
- Dark Chocolate
  - Hershey's Special Dark (~45%)
  - Ghirardelli Intense Dark (60%)
  - Scharffen Berger (70%)

## Procedure

1. Separate chocolate by brand and type
2. Conduct the following three tests and record the results in the data table below:
  1. Snap Test
  2. Taste Test\*
  3. Texture Test

**\*NOTE:** You are under no obligation to eat any chocolate you do not/cannot eat! Simply find a partner to share their results with you.

Chocolate	Snap Test	Taste Test	Texture Test
Lindt White			
H. Milk			
G. Milk			
SB. Milk			
H. Dark			
G. Dark			
SB. Dark			

## Conclusions:

Which chocolate(s) was correctly tempered? How could you tell?

Which one was your favorite? Why?