Name:_____

Food Packaging Materials

Material	Pros	Cons	Chemical Properties/ Changes Involved	Physical Properties/ Changes Involved
Textile/Cloth	- Inexpensive - Is good for transporting things in bulk.	- Does not protect food well from gas, moisture, or physical damages. - Is not usually very aesthetically pleasing.	- Oxidation	- Structure
Metal	- Completely protects the contents of the contents of the package. - Suitable for storage and appearance. - Tamperproof	- Expensive because of the materials and manufacturing costs. - Is heavy which makes transportation costly and inconvenient.		- Mass - Strength
Glass	- Does not allow gas or moisture in or out. - Protects food from physical damages. - Can be heated. - Can be reused and recycled. - Clear in order to display contents. - Rigid to allow easy stacking and storage. - Can be sealed.	- Is heavy which makes transportation costly and inconvenient. - Can be damaged easily. - Damage can lead to injuries.	- Carbonation	- Structure. - Phase change.
Plastic Wrap	- Inexpensive - Relatively protective from moisture and gasses.	- Does not protect food from physical damages.	- Oxidization	- Phase change - Mass - Structure

Name:_____

	- Can be sealed by heat - For example, salad bag, candy bar wrapper - Light so it can be handled and transported easily and inexpensively. - Fits tightly to material so it does not waste extra space.	- Amount of moisture and gas protection is small. - Bad for the environment.		
Laminated Plastic Wrap	- Lamination gives extra protection from moisture and gasses. - Protects wet foods such as butter.	- Does not protect food from physical damages. - Bad for the environment.		- Structure
Structured Plastic	- Keeps gas and liquid in. - Protects from outside gas and moisture. - Can be sealed.	- Bad for the environment.	- Carbonation	
Paper	- Can be strong enough to carry heavy foods. - As a liner, is an aesthetic protector from dirt.	- Does not protect food from physical damages. - Without extra chemicals, does not protect food from gas or moisture.	- Oxidation	- Strength - Structure
Cardboard	- Protects food from most physical damages. - Can provide a small amount of insulation. - Can be heated.	- Provides some moisture protection but will not hold a great amount of liquid.		- Structure - Phase change