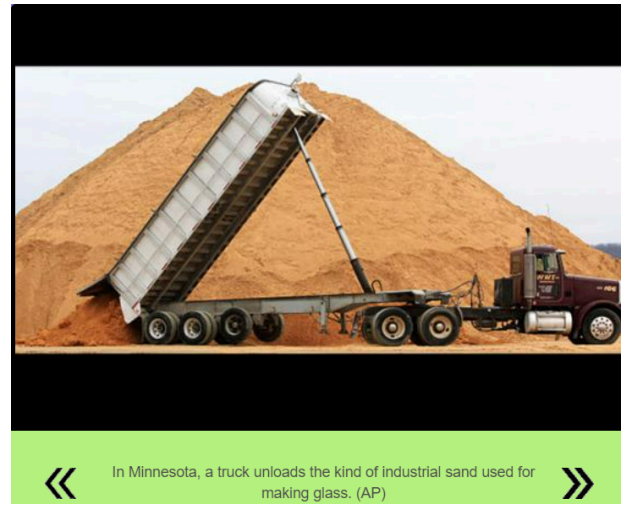


# Stained Glass Handout #1

## How is Glass Made?

Venetian glassmakers designed much of their glass to be admired from a distance. But many kinds of glass have other purposes. Can you think of times you've used glass just today? When you woke up, you may have looked into a glass mirror. If you rode in a car, a glass windshield probably kept bugs from splatting against your face. Did you open a glass door today, eat from a glass dish, or turn on a glass light bulb? Are you wearing glasses on your nose?



Glass comes from liquid sand. If that isn't mysterious enough, think about this: Glass isn't a liquid or a solid. It's somewhere in between! To make glass, you have to heat up sand until it melts. That takes very high heat—3,090 degrees Fahrenheit! After shaping the material, you have to cool it again. It doesn't turn back to sand. It becomes glass.

But not all glass is made exactly the same way. Glass for bottles and other shaped objects is poured into molds. Glass for fancy, unique objects is blown with a blow-pipe. Glass for windows has to be absolutely flat, so glassmakers pour it on top of a vat of melted tin. That turns it into a perfect sheet. Glass used in cars has to survive lots of motion—running over rocks, hitting potholes, and maybe even colliding with other cars. Because of that, cars have something called safety glass. It is very strong. To make it, glassmakers put a thin layer of film between two layers of glass. Then they use heat and pressure to join the layers together.