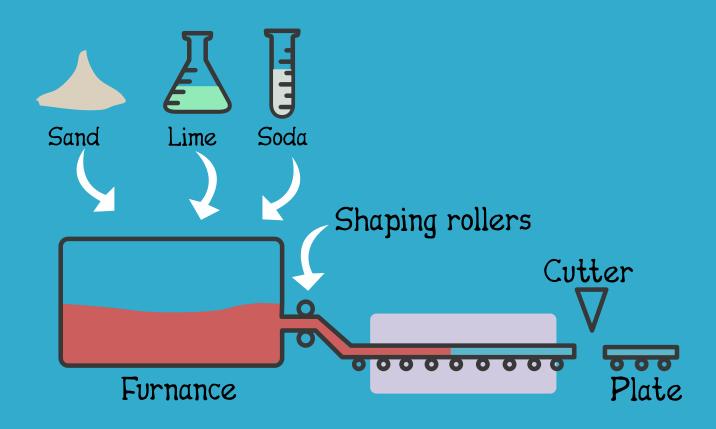


Glass is made from a mixture of sand, lime and soda. When these ingredients are heated together, they form a liquid glass. This liquid glass is made into sheets by cooling and flattening. To make objects like vases, craftsmen blow into a blob of liquid glass with the help of a long tube.



PLATE GLASS MADE BY ROLLING

Sand, lime and soda are heated together in a furnace to make liquid glass. Rollers are used to flatten glass into sheets, which are first cooled then cut.



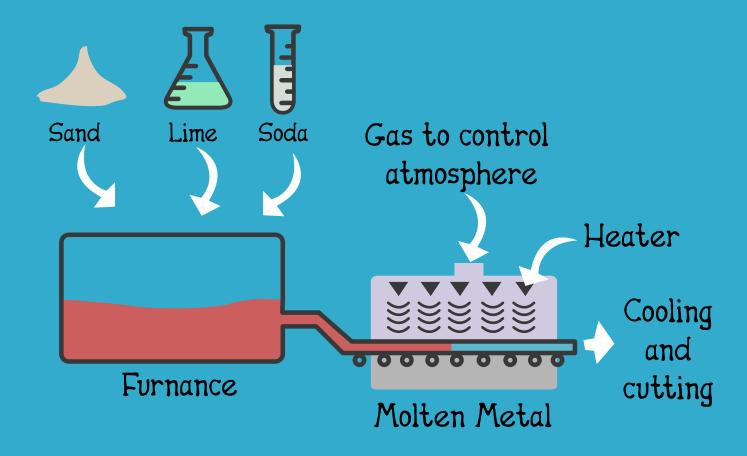


PLATE GLASS MADE BY FLOATING

Liquid glass from a furnace is floated and slowly cooled on the surface of liquid tin. After the glass has cooled down, it is cut into pieces.



HANDMADE GLASSWARE

Vases, ornaments and other intricate glass objects are made by a glass-blower. The glass-blower uses a metal blowpipe which has a blob of hot glass at the end of it. A glass blower then blows the soft glass into shape with his hands.



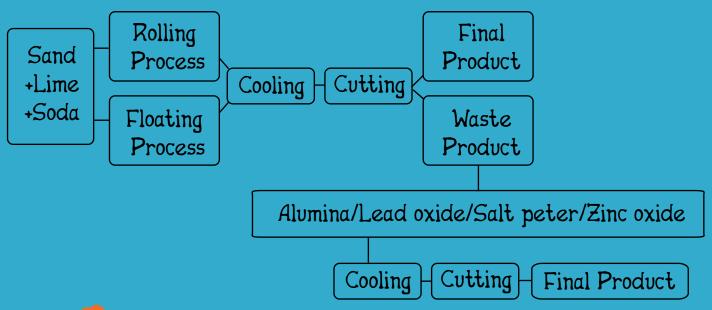
GLASS HAS MANY USES

Glasses, window panes, mirrors are few of the many things that are made from glass. Glass is not only useful, but can look beautiful too. Windows made of stained glass are works of art.



ADDITIONAL INFORMATION

Other glass-making ingredients can include alumina, lead oxide, salt peter and zinc oxide which are used to make different types of glass. In the production of plate glass, waste glass from a previous melt is also added, making up 5 to 40 percent of the mixture. Melting takes place in giant furnaces from where molten glass is floated or rolled into sheets.







PROJECT

Identify different glass objects in your house and notice how each one looks and feels different.

Try making a visit to a glass factory or inquire about a glass-blower and see how they give shape to objects.

Try looking through different glass objects. What do you see?