

Solids, liquids, and gases



Background knowledge

Three phases of matter exist naturally on Earth: solids, liquids, and gases. Generally, solids are substances that retain their shape and do not flow. Liquids flow and take the shape of the container they are in. Gases also flow and fill all of the space available. Some types of matter can exist in all phases on our planet.

Science activity

Which of these materials are solids (S), which are gases (G), and which are liquids (L)? Circle the ones that exist in all three phases on Earth. Write S, G, or L in each box.



Cotton



Plastic



Wood



Jello



Air



Water vapor



Wood



Water



Milk



Metal



Silk



Oxygen

Science investigation

Obtain a plastic zipper bag, borax, and Elmer's glue. In a bowl, mix 125 ml of glue with 125 ml of water until thoroughly combined. Pour the mixture into the zipper bag. Then measure 1 tbsp of borax and mix it into another 125 ml of water. Pour 50 ml of the dissolved borax into the zipper bag with the other mixture. Close the bag and knead the mixtures together for 2–3 minutes, until thoroughly combined. Remove your mixture and test whether it is a liquid or solid. Also test for other properties.