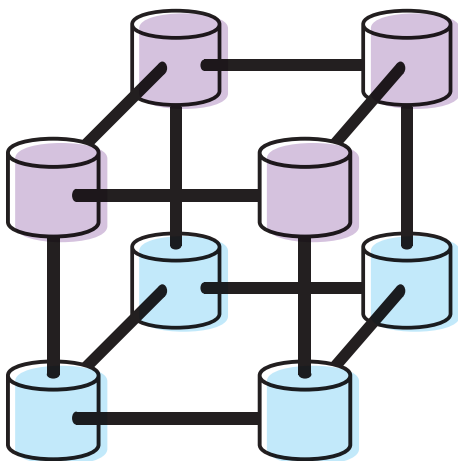
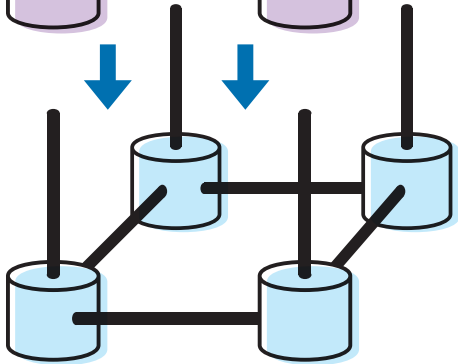
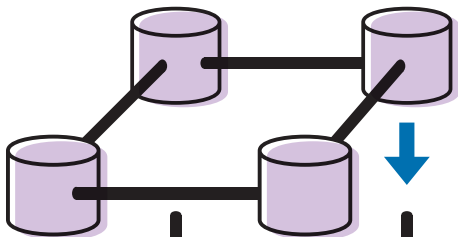
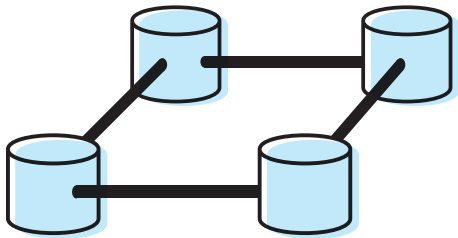


AT-HOME SCIENCE ACTIVITIES

3-d crystal shapes



MATERIALS

sticks

You can use toothpicks, popsicle sticks, straws, pretzel sticks, uncooked spaghetti, or other similar materials.

stickies

You can use mini marshmallows (stale ones work best), gumdrops, fruit snacks, clay, Playdoh, or other similar materials.

DIRECTIONS

Take one stick and add a sticky to each end. Take another stick and attach it to the first stick with one of the stickies. Repeat this step until you have formed a square. Make another square of the same size. Lay your first square down on the table in front of you and place four new sticks into the corner stickies at a right angle (sticking straight up from the table). Place the second square that you made on top of the vertical sticks of the first square and connect each corner.

LOOK—YOU MADE A CUBE!

THE SCIENCE

In the Weinman Mineral Gallery at Tellus Science Museum, you can see all kinds of rocks and minerals from Georgia and around the world. But what is a mineral? A mineral is a naturally occurring substance made up of crystal structures from one element. Crystals come in many shapes and types. If you look through a microscope, you can see that different minerals have crystals that are different shapes. For example, you just made a cubic or isometric crystal structure which is found in many common minerals—such as halite (table salt), pyrite (fool's gold), and even diamonds.

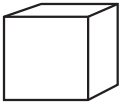



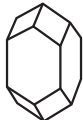

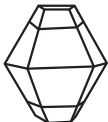











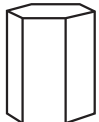
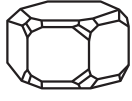
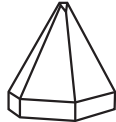
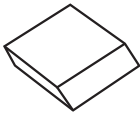



EXPERIMENTS

- TRY THESE 3-D SHAPES:
 - a. Hexagonal like **beryl**
 - b. Trigonal like **calcite**
 - c. Tetragonal like **zircon**
- Using only 20 sticks, how tall can you make your crystal structure?
- Can you construct a shape strong enough to hold a book?

#MuseumFromHome

AT-HOME SCIENCE ACTIVITIES

crystal shapes by system

CUBIC					
	cube	octahedron	galena		
TETRAGONAL					
	cassiterite	zircon	scheelite		
ORTHORHOMBIC					
	sulfur	barytes	olivine		
MONOCLINIC					
	wolframite	gypsum	augite	orthoclase	
TRICLINIC					
	chalcanthite	kyanite	axinite	rhodonite	albite
HEXAGONAL					
	beryl	apatite	zincite		
TRIGONAL					
	rhodochrosite	calcite	corundum	quartz	

#MuseumFromHome