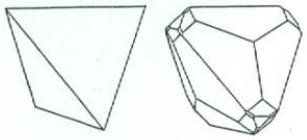
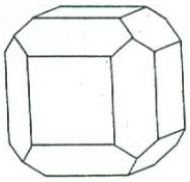
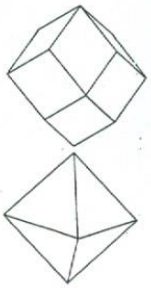






Crystal Shapes

Read all the directions through first.
Carefully cut out the shapes on the solid lines.
Fold the dotted lines downward.
Before you glue anything, try to put the shape together so you see where everything should go. See how the tabs will be glued to hold the shape of the crystal.

Glue the tabs to the inside of the shape. Glue the tabs in alphabetical order – all the A's, then the B's and so on. Put the glue on the tabs only. Use a little glue so it doesn't smear. Hold the tab a bit so it dries before you go to the next piece.

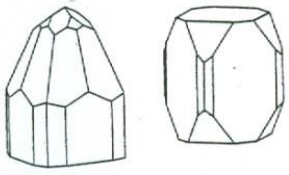
The tetrahedron is the easiest shape to start with. The hardest shape is the cube and octahedron combination. Because the last steps are hard to glue, you might want to try using small pieces of tape at least on the last section.

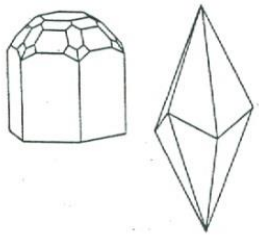
Minerals

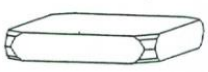
Minerals form certain shapes of crystals. Each mineral, because of what it is made of, can only form certain shapes. Galena (lead ore) can be a cube or an octahedron or a mixture of these two, but it won't, for example, ever be a six sided pyramid.

If the mineral has room to grow, it is easier to see the shape of the crystal. In nature, though, most minerals grow in crowded spaces where the crystals clump together so that the shape of the crystals are hard to see or the crystals are stunted, tangled and deformed.

Minerals are inorganic (that means not alive) solids made of chemicals and with a crystal structure. All the rocks of the world are made of minerals. Some minerals, called gems are valuable because of their beauty. Other minerals are useful metals. Some minerals, like gold and copper, can be found pure or unmixed. That's what's meant by native copper. Most minerals are a mixture. Galena is a mixture of lead and sulfur, and sphalerite is a mixture of zinc and sulfur.

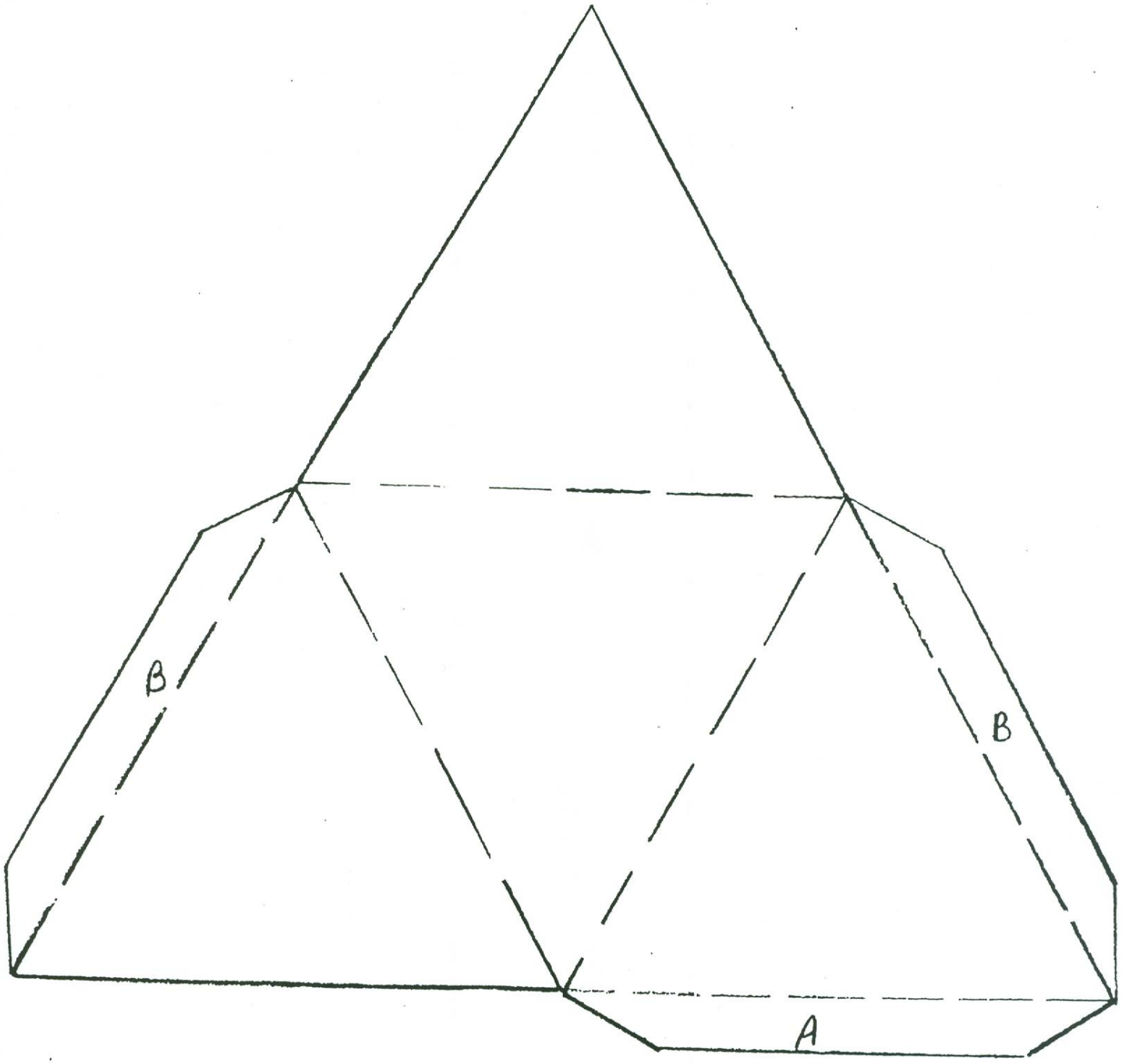






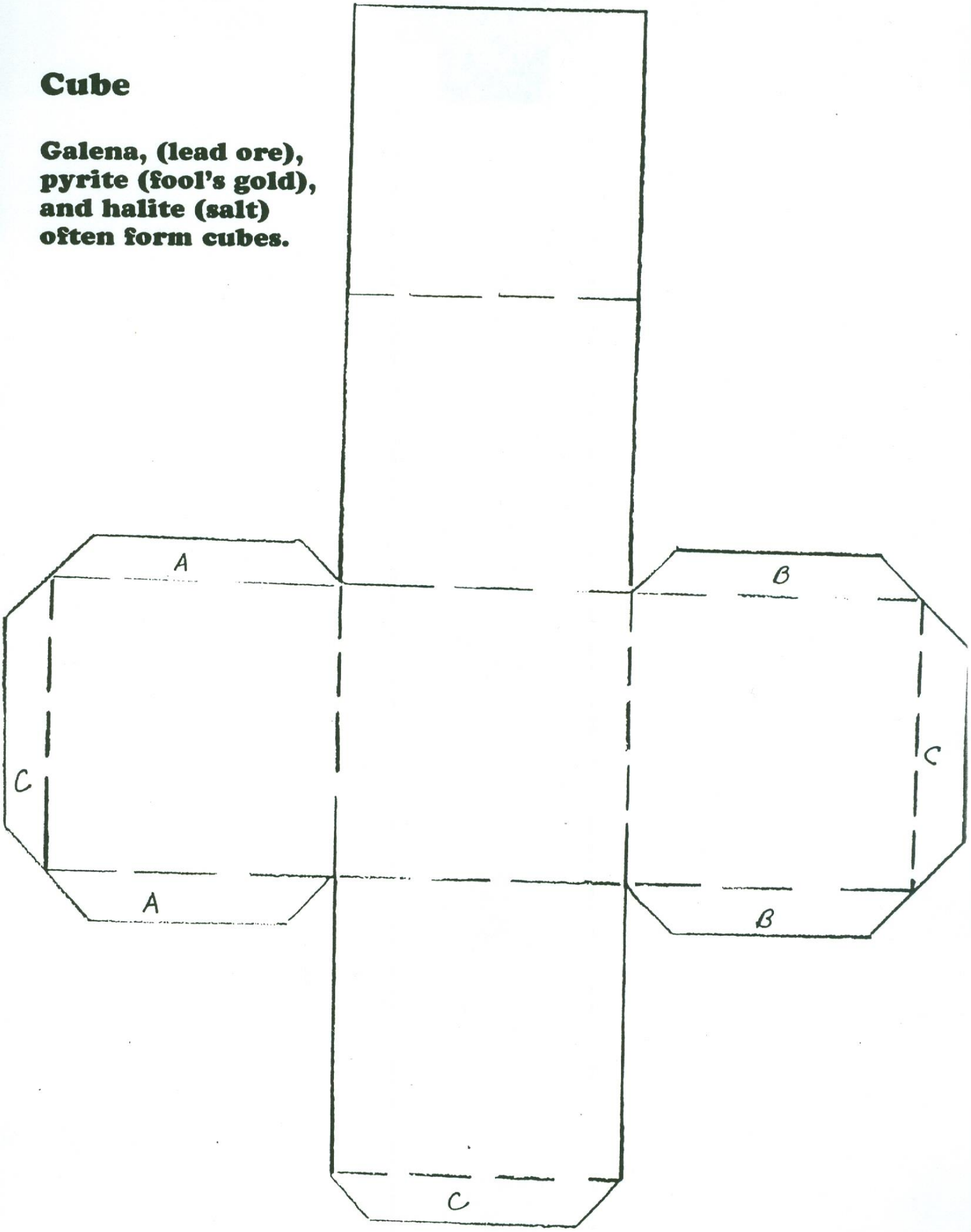
Tetrahedron

Sphalerite (zinc ore) and tetrahedrite (a copper ore that got its name because of the shape of its crystals) sometimes form tetrahedrons



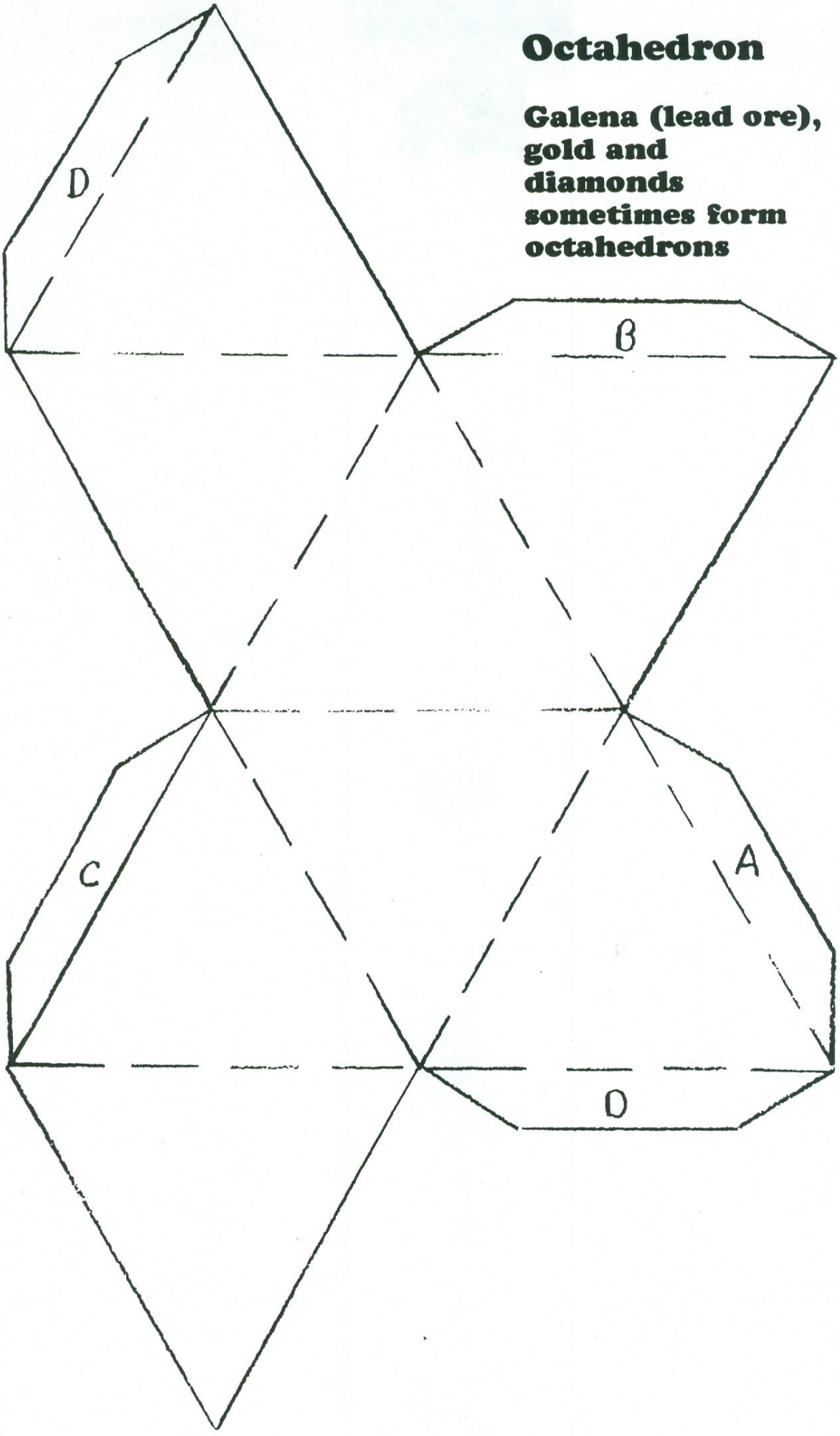
Cube

Galena, (lead ore), pyrite (fool's gold), and halite (salt) often form cubes.



Octahedron

Galena (lead ore), gold and diamonds sometimes form octahedrons



Cube and Octahedron combination

Galena (lead ore) cuprite (a copper ore)