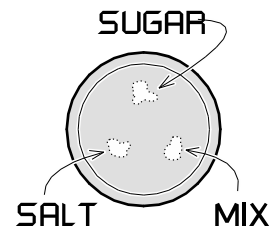


UP CLOSE WITH CRYSTALS

Diamonds . . . snowflakes . . . rubies . . . salt. What do these have in common? They are all *crystals*. Today you will examine and identify some crystals for yourself.

What You Need: Your pocket microscope, a salt packet, a sugar packet, and a colored plastic plate. (You will also use the plate in future lessons, so don't throw it away.)

What To Do: Sprinkle a few grains of salt in one part of the plate, a few grains of sugar in a second spot, and mix some of each in a third area. Study the salt grains through your microscope, then study the sugar. Finally, look at the mixed pile. Can you tell the salt grains from the sugar grains?



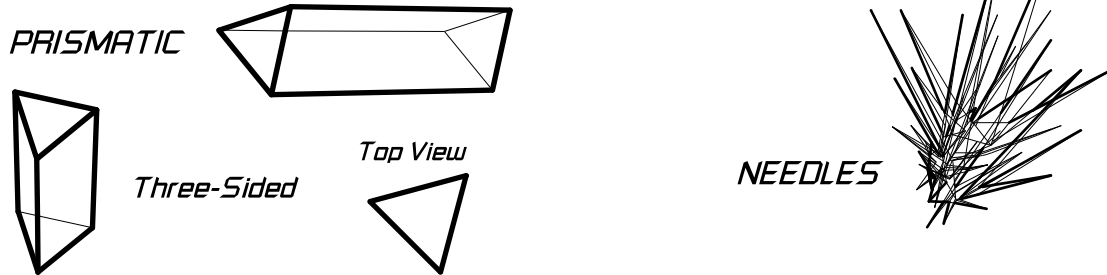
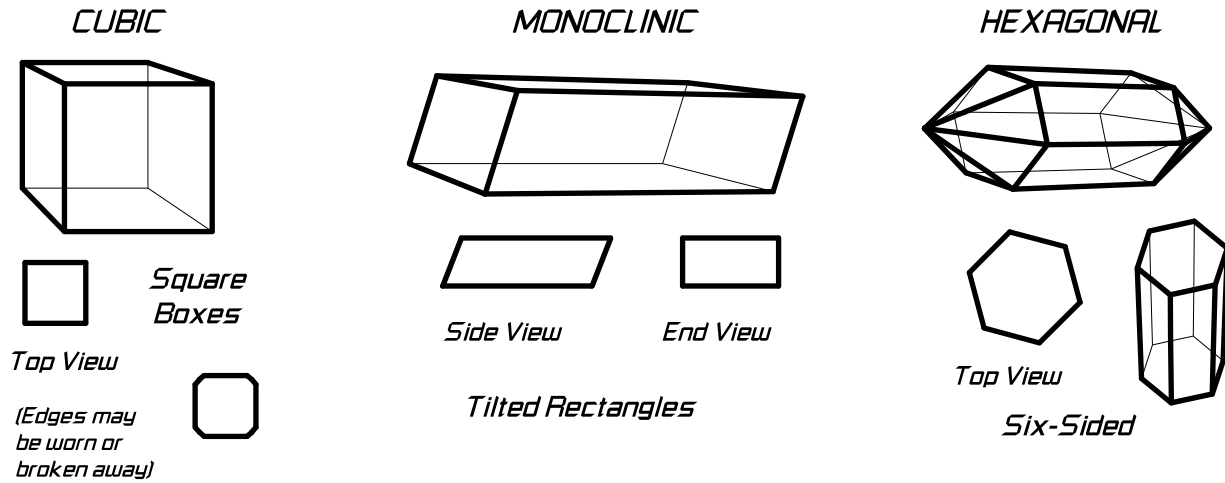
List two similarities and three differences between sugar and salt.

<i>SIMILARITIES</i>	<i>DIFFERENCES</i>
They both ...	Sugar ... While salt ...
They both ...	Sugar ... While salt ...

Take a close look at both salt and sugar, and see if you can identify the shape of each from the chart below.

SALT'S SHAPE: _____

SUGAR'S SHAPE: _____

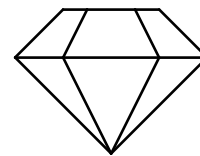


Diamond is also a crystal.

If you are so fortunate that someone in your house has a diamond, ask if you may look at it through your microscope!

AMAZING DIAMOND FACT:

DIAMONDS ARE MADE OF THE SAME STUFF AS **CAMPFIRE SMOKE** AND **ASHES!** THAT STUFF IS **CARBON ATOMS.**



IN DIAMOND, THE CARBON ATOMS ARE STACKED SO TIGHTLY TOGETHER THAT IT'S LIKE **ONE GIANT CARBON MOLECULE!**