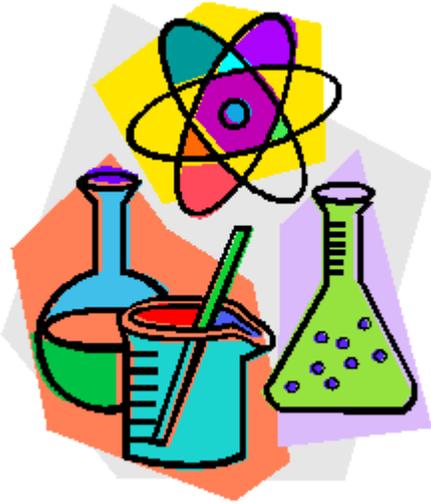


# Summer Scientists!



This week, we will be learning about

## CRYSTALS!

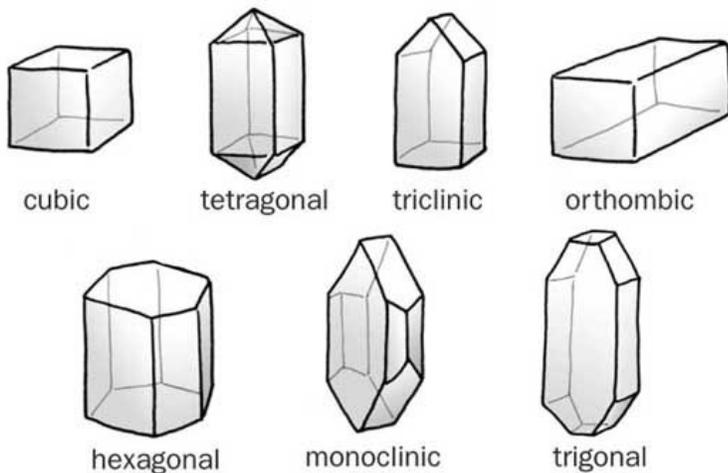
There will be a video about this topic posted on our YouTube channel on Wednesday, June 24! Check it out at [YouTube.com/TewksburyLibrary](https://www.youtube.com/TewksburyLibrary)

### What is a crystal?

Most matter that is not alive has a temperature where it becomes a solid. This is called the **freezing point**. (For water, this is 32 degrees Fahrenheit.)

When a liquid starts to get colder, the molecules that make up the liquid will start to harden. Most of the time, the molecules will start to stick together in patterns that keep repeating. This is a crystal! When it grows big enough, you can see them easily.

The shape of the crystal depends on what material it is made out of. If you see salt crystals, they are cubic, like little dice!



# TODAY'S EXPERIMENT:

## Grow your own crystals!

### YOU NEED:

- Borax—this is used to do laundry so you can find it in most grocery stores
- pipe cleaners
- thread or thin string
- a glass or strong plastic cup or jar
- a pencil or popsicle stick
- boiling water
- food coloring (optional)
- a grown-up



### WHAT TO DO:

1. Take your pipe cleaner and bend it into any shape you like. You can try something formed, like a flower, or more scrunched up, like a bird nest.
2. Have a grown-up boil water. (I used an electric tea kettle.) Pour it into the jar a bit more than half-way, and stir in as much borax as you can. When you see bits fall to the bottom that don't dissolve, you have made a "saturated solution" - it's holding as much as it can.
3. Tie thread on your pipe cleaner, and tie the other end onto a pencil. It should hang into your jar, completely under the solution, without touching the sides.
4. Place the jar (careful! It's hot!) somewhere that it won't be disturbed.
5. Wait overnight, and pull out your crystal the next morning.