

# Introduction to Chemistry

## Teacher Notes, Tips, & Hints

**Note for PowerPoint:** The PowerPoint included is an animated PowerPoint. **Please don't make changes to the PowerPoint until you have viewed it in slide show mode.** The text of the PowerPoint is editable. Some of the fonts and clipart are not editable due to copyright restrictions. The last slide is for you should you want to add a slide (gives you the same background). Just type in your text, add pictures if you want, and drag it to its place in the lesson. If everything is okay as it is, delete this slide.

### The Lesson:

The main concept of this lesson is for students to become familiar with the divisions of science, and where chemistry stands in the world of science, the scientific method, and scientific theory versus scientific law. At the end of the lesson, students will put the scientific methods to use by working together in groups to solve a problem!

I have included a "Check For Understanding" exit ticket and a homework assignment that could be used for in class the next day.

### Team Challenge:

I have included a team challenge which always wakes them up at the beginning of the year! I give each team one sheet of printer paper while they are brainstorming hypotheses/designs that may produce the tallest tower. Then I go around with my tape dispenser and ruler, giving out 2 cm of tape (stuck to the edge of the lab bench). I used to not give out any tape which leads to interesting problem solving, but I got tired of spit wads being used as tape! I have had towers taller than 103 cm, but I always give them an achievable goal. If the tower falls in less than 5 seconds—be at the ready with the meter stick & metric ruler—I give them one "do over". If the tower falls a second time they are disqualified. I will usually have 1-2 disqualified per class.

Do put them on a timer! If not, they will take a week to design their tower. I give them 15 minutes until the measuring station opens. All measurements must be done in 25 minutes- including do overs- or they are disqualified. This forces them to work together quickly, and stay on task. Play around with the timing. But, the main thing is to not show them this slide, and then let them think about it overnight. For best results, show them the challenge slide, and then start the activity!

If you don't want to use the team challenge, just delete that slide.