LEARNING WITH LASF!

Lafayette Arts & Science Foundation
There for every child.

Dear Parent,

Today your Third Grader began the unit on **"Beginning Chemistry."** The LASF Science Instructors are particularly excited about teaching this fun and interesting unit. The Instructor will visit your child's class for a total of four one-hour sessions. Young students will be given experience with the phases of matter and the ways in which matter can change.

On the reverse side of this page is a day-by-day summary of the different activities your child will enjoy and learn in the weeks ahead.

For 25 years, the Lafayette Arts & Science Foundation has provided a variety of science enrichment classes for the elementary school and middle school students in Lafayette. All of the materials needed for the classes are provided by LASF. Funds for these classes come from the Foundation funds that are donated by you, the parents!

If you would like to find out more about LASF or become a part of our exciting program, please call us at 299-1644, visit our website at www.lasf.org or e-mail us at office@lasf.org.

Your LASF Team

LASF's mission:
To support and enrich the education of every child in the Lafayette public schools through a broad community-based effort.

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BEGINNING CHEMISTRY

Day 1 **Students are introduced to the concept of matter, and examine the phases of matter– solid, liquid and gas.**

THE ELEMENTS SONG: Listen to a fun song to help you learn the names of all of the elements. It's "The Element Song" at http://www.privatehand.com/flash/elements.html

Day 2 **Students experiment with cabbage juice to observe the color changes that result from chemical change.**

EASY APPLE EXPERIMENT: A chemical change produces a new substance with different chemical properties. Color changes, solid formation, gas bubble formation, and color disappearance are indicators of chemical changes. Here is a quick and easy way to witness chemical change: Cut an apple into two sections. Observe the exposed area immediately. After ten minutes observe what happens to the inside color. The oxygen in the air reacted chemically with the apple and caused a color change!

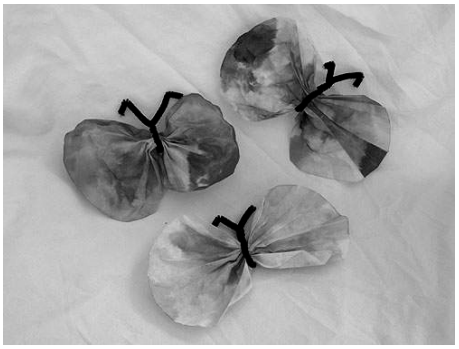
Day 3 **Physical changes are discussed as students make "crystal gardens" and salt solutions.**

CHEMICAL OR PHYSICAL CHANGE? In a physical change there is only a change of state. The new substance has the same properties as the old one. No new substance(s) are produced, for example, ice and steam are both forms of water! In a chemical change one or more NEW substances are created. The new substance is different from the original with properties that are different from the starting materials. Plus, you cannot get the original materials back easily.

Determine whether the following are physical or chemical changes:
popping corn, boiling water, tearing clothes, scrambling eggs, tarnishing silver, chewing food, breaking a stick, roasting a marshmallow, melting ice cream, sawing wood, stretching a rubber band. **Find the answers on our website at www.lasf.org.**

Day 4 **Students use science techniques to separate colors.**

COFFEE FILTER COLOR SEPARATION: Here's how you can separate color at home….you'll need: a paper coffee filter, colored markers (not sharpies or highlighters) and an eyedropper. Make colored marker lines on the coffee filter, and then place droplets of water on the color. What happens? You should see the colors separating. To make a butterfly out of your colored coffee filter (the round "Mr. Coffee" type), flatten the coffee filter and fold it accordion style, in about 1/2" pleats. Position the middle of the pleated coffee filter into the middle of a pipe cleaner and then twist the pipe cleaner stem around the filter. Bend the tips to make antennae. Fan out the wings and you have a butterfly!



LASF provides 11 hours of hands-on science to your third grader. We work in partnership with the science lab teachers and classroom teachers to give your child a comprehensive science experience.

For more information about LASF, please visit our website at www.lasf.org or call our office at 925-299-1644.