LETTER TO FAMILY

Cut here and glue onto school letterhead before making copies.

Science News

Dear Family,

Our class is beginning a scientific study of solids and liquids. We will observe the properties of many solids and liquids, comparing how solids and liquids are alike and how they are different; organize the results of our inquiries; and communicate both orally and in writing the things we discover. These processes (observing, communicating, comparing, and organizing) are the basic thinking processes students need at this age to develop a scientific understanding of the world around them.

Your child may ask you for help finding solids and liquids at home. You'll want to discuss and compare the different characteristics of those you find. (For example, how are salt and sugar alike? How are they different?) You may find yourself observing what happens when solids and liquids are put together. Making lemonade or salad dressing can provide interesting observations when solids and liquids are mixed. Watching an ice cube melt is a way to observe a solid change to a liquid.

We're looking forward to lots of fun and lots of learning as we explore a world full of solids and liquids!

Sincerely,

HOME/SCHOOL CONNECTION

Investigation 1: Solids

Play "I spy a solid object" with someone at home. These are some of the words we have been using in class to describe solids. Next to each word, draw or write the name of the solid you spied that matches the word. Add any other properties of solids that you spied.

I spy a solid object that is . . .	
flexible	rigid
smooth	rough
soft	transparent
flat	pointed

HOME/SCHOOL CONNECTION

Investigation 2: Liquids

Find a container of liquid at home.
Draw a picture of the liquid.

Record the properties of the liquid.

This liquid is called _____.

This liquid has these properties.

- ☐ transparent
- ☐ translucent
- ☐ bubbly
- ☐ viscous
- ☐ foamy
- ☐ has color
- ☐ _____
- ☐ _____
- ☐ _____

Draw the bottle here.

HOME/SCHOOL CONNECTION

Investigation 3: Bits and Pieces

Soak, Slide, or Pile Up?

Compare what happens when you drop a spoonful of different materials on a paper towel. You might try water, rice, milk, flour, cornmeal, or dry beans. Then try the same materials on a different surface, such as plastic wrap or foil.

What did you observe?

Material	Solid or liquid	On paper towel	On other surface
Water			
Rice			

HOME/SCHOOL CONNECTION

Investigation 4: Solids, Liquids, and Water

Salad Dressing

Cooks are chemists! Cooks investigate solids, liquids, and mixtures all the time. Make some tasty salad dressing to investigate what happens when solids and liquids are mixed.

You will need a plastic container with a lid, salt, oil, pepper, vinegar, and a spice such as rosemary, oregano, or basil.

1. Add 1/3 cup of vinegar to 1/2 cup of oil. Draw your observations.

2. Put on the lid and shake. Draw your observations.

3. Let it sit for 5 minutes. Draw your observations.

4. Add 1/2 teaspoon of salt and shake. What happens?

5. Add 1/4 teaspoon of pepper and shake. What happens?

6. Add _____ teaspoon of _____ and shake. What happens?

Try your salad dressing on a salad. How does it taste?