

## "Oil Painting" for First Grade Scientists

In their studies in physical science, first graders learn that liquids are a form of matter and they experiment with various liquids to learn about their unique qualities. They also experiment with mixing various liquids to find out what happens when different liquids are combined. Do they behave the same once they are mixed together? Is it possible to tell that two different liquids have been combined? Experimenting with different liquids such as oil and water will allow your first grader to examine the answers to these questions and many more, while learning about density. In the activity below, your child will paint with oil and water and discover that that age old assertion is in fact true: oil and water don't mix. This is a twist on oil painting that your first grader will love!



### What You Need:

- Vegetable oil
- Powdered tempera paint in a few different colors (can be found at an art store or craft store like Michael's)
- Paper
- Shallow cake pan
- Water
- Spoons
- Cups
- Newspaper

### What You Do:

1. Allow your child to mix several spoonfuls of the powdered tempera paint with 1/2 cup of the oil. Stir the mixture until it looks creamy.
2. Help your child fill the cake pan about 1/2 full with water.
3. Let your child spoon a few drops of the oil paint mixture on top of the water. She can experiment with more than one color or she can stick to one.
4. Then allow your child to use a spoon to gently swirl the paint in the water. You and your child will notice that the oily paint floats on top of the water in the pan. This happens because the water is more dense than oil. Oil will not dissolve in the water and so oil stays oil and water stays water. These two liquids won't mix, no matter how hard you try, because they are insoluble.
5. Your child will use the oily paint on top of the water to make a picture. Give your child a piece of paper and let her lay the paper on top of the water and oil paint. Let the paper float for a minute or so.
6. Allow your child to carefully lift the paper by one corner and place the painting on newspaper to dry.
7. Experiment with other materials such as waxed paper, paper plates, or plastic wrap. Compare these paintings to the painting on the plain paper.

When your child is done, be sure to let the paper dry completely. In the pursuit of science, she has managed to create some lovely "marbled" paper along the way! This paper is terrific for wrapping packages or making special stationery and, of course, for reminding everyone how science is a part of our everyday world.