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Lesson Plan
Derricks to Desks
July 2000**

Objective: This lesson is an introduction to the importance of oil, its origin and uses. Students will recognize and select items that are petroleum products.

Materials: examples of petroleum products, posters and lists of petroleum products, oil samples, magazines, newspaper, scissors, glue, and construction paper (optional: construction paper or felt pieces to be used to illustrate creation of oil).

Anticipatory Set: Place items such as sunglasses, lipstick, shoes, trash bags, paint rollers, toothbrushes, shampoo, tape, credit cards, crayons, golf balls, aspirin, mops, and perfume on a table at the front of the room. Ask students what do all of these items have in common? Hint: What product is used to make all of these items? Accept guesses. Show oil sample and explain that each item is actually a petroleum product people use everyday.

Procedure: Explain that petroleum is just another name for oil. It is found under the ground. Ask if anyone knows how oil got there? When I was little, we were told that oil was the remains of dead dinosaurs. Now I know where it really came from though. It actually started to form even before dinosaurs walked on the earth. That was a really long time ago. Millions of years ago, most of the earth was covered by oceans. In these oceans lived billions of tiny plants and animals called plankton or diatoms. When these plants and animals died, they sank to the bottom of the ocean floor. As time passed, lots of sand also sank down and covered them. Now sand is very heavy, as you know if you've ever let someone cover your body, arms, and legs with it at the beach. In addition, the ocean floor is way down deep in the earth. It's a lot closer to the center of the earth than we are. And the nearer you are to the inside of the earth, the warmer it is. So these tiny dead plants and animals became covered by sand that eventually turned to rock. The weight of the rock and the heat of the earth basically cooked the little creatures into oil. Now, don't forget that it took a long time for these plants and animals to rot away and become oil, millions of years in fact.

Now ask where oil is found these days? Accept underground or under the ocean and explain that oil is found buried in tiny pockets in rocks. Ask if anyone has ever seen a pumpjack? Explain that we drill for oil and pump it out of the ground. Show pictures of pumpjacks and drilling rigs. Explain that oil in the United States is most commonly found in Alaska, Texas, and California and that Kern County is an important place for oil production.

Explain that oil use is not new. Ancient Egyptians used oil to make the wheels of their chariots turn smoothly and quietly. Egyptians also used oil when they created mummies. The Chinese used it to shine their swords and armor and to make light. Babylonians used oil to waterproof boats, pave streets, make dams, and as a medicine. South American Indians lit their arrows to use fire against their enemies. And our Native Americans thought that oil cured stomachaches and prevented sunburn and insect bites. The Yokut Indians that lived here in Kern County used oil to waterproof their baskets.

Today we have even more uses for oil. One of the most important uses of oil is making gasoline. Ask what important machines run on gasoline and similar fuels? Ask what would happen without gasoline? How would we get to school, to doctor's appointments, to soccer games? How would our food get from the farm to the store? How would we get mail in a timely fashion or travel to far off places without oil? Show lists and posters of other uses of oil such as in waxes, plastic products, synthetic fabrics, automobile parts, building materials, cosmetics, medicines, synthetic rubber, and so on. Allow for discussion.

Assessment: Cut pictures and words from newspapers and magazines that show petroleum products. Create a collage.