

Oil Industry Mini Unit



Grades 2/3

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“Kern County Oil- The First 100 Years?” Video Presentation

OBJECTIVE: Learn history of oil in Kern County. Learn location of Kern County. Compare present day with the past. Use map skills.

VOCABULARY: county, derrick

MATERIALS: video, California maps (class set), question sheets (class set)

PROCEDURE:

- Pass out state maps and explain how state is divided into counties. Identify Bakersfield on map.
- Explain definition of oil derrick
- Pass out question sheets.
- Show video

VIDEO PROCEDURE: You will need to stop the video from time to time to ask questions and discuss answers. These are approximated stopping points if you use the counter on your VCR.

At 0030 (When man begins speaking) ask questions 1 and 2.

At 0185 question 3.

At 0270 (After Jane Kinsey speaks) questions 4, 5, &6.

At 0330 (After Claude Fiddler) ask last question. You can, but do not need to, show the rest of the video. It may be too difficult for students to comprehend the process being explained. Additional option would be to show the video again uninterrupted for the student's enjoyment as well as reinforcing comprehension.

VIDEO QUESTIONS

1. What is the date at the beginning of the video? How long ago was that?
2. Why is the man dressed like that? Why do you think he has a donkey?
3. Why did so many people come to Bakersfield? What county is Bakersfield in?
4. Do oil derricks from back then look like the oil pumps we have now? How are they different?
5. The video showed a couple of pictures of people on rafts. Is that water that they are rowing in?
6. What were some of the things that children, who lived in the oil fields, did for fun?
7. After awhile the oil was really difficult to get out of the ground, what did they pump into the ground to help them get the oil out again?

Where Does Oil Come From And Who Uses It?

OBJECTIVE: visualize oil, identify its origin, learn its uses through time, brainstorm and discuss present day uses.

MATERIALS: The ABC's of Oil -Chevron (see <http://www.channing-bete.com>), oil sample, "Petroleum in Our Lives" handout (found in *Petroleum Products* folder), History of Oil & Gas Seeps in Santa Barbara Channel -WSPA (found in *Introduction to the Petroleum Industry* folder), blank sheet of paper, pencil.

PROCEDURE:

- Pass around oil sample and ask students to guess what is in the vile.
- Ask: Where does oil come from? Comes from ground, we use pumps.
- Explain early uses of oil. Use ABC's of Oil as reference, pages 4 and 5.
- Ask: How did people get the oil out of the ground before they had the big, fancy oil pumps?
- Inform students about early tar pits and oil seeps. Use History of Oil & Gas Seeps in Santa Barbara Channel as reference.
- Say: Many things today are made by using oil. Plastic items are made with oil. Can you think of some things that you use that are made with oil?
- Put students in small groups and have them brainstorm possible answers to be recorded on a blank sheet of paper. Allow 3-5 minutes.
- Pass out "Petroleum in Our Lives" handout. Go over list as a class.

PETROLEUM IN OUR LIVES

HOW MANY OF THESE PRODUCTS DO YOU USE?

- Ammonia
- Anesthetics
- Antifreeze
- Antihistamines
- Antiseptics
- Artificial turf
- Artificial limbs
- Aspirin
- Awnings
- Balloons
- Ballpoint pens
- Bandages
- Beach umbrellas
- Boats
- Cameras
- Candles
- Car enamel
- Car battery cases
- Car sound insulation
- Cassettes
- Caulking
- Cigarette filters
- Clothes lines
- Cold cream
- Combs
- Cortisone
- Crayons
- Credit cards
- Curtains
- Dashboards
- Denture adhesive
- Dentures
- Deodorant
- Detergents
- Dice
- Dishwashing liquids
- Dresses
- Drinking cups
- Dyes
- Electric blankets
- Electrical tape
- Enamel
- Epoxy paint
- Eyeglasses
- Fan belts
- Faucet washers
- Fertilizers
- Fishing boots
- Fishing lures
- Fishing rods
- Floor wax
- Folding doors
- Food preservatives
- Footballs
- Glue
- Glycerin
- Golf bags
- Golf balls
- Guitar strings
- Hair curlers
- Hair coloring
- Hand lotion
- Hearing aids
- Heart valves
- House paint
- Ice cube trays
- Ice buckets
- Ice chests
- Ink
- Insect repellent
- Insecticides
- Life jackets
- Linoleum
- Lipstick
- Loudspeaker
- LP records
- Luggage
- Model cars
- Mops
- Motorcycle helmets
- Movie film
- Nail polish
- Nylon rope
- Oil filters
- Paint brushes
- Paint rollers
- Pajamas
- Pantyhose
- Parachutes
- Percolators
- Perfumes
- Permanent-press clothes
- Petroleum jelly
- Pillows
- Plastic wood
- Plywood adhesive
- Purses
- Putty
- Refrigerants
- Refrigerator linings
- Rollerskate wheels
- Roofing
- Rubber cement
- Rubbing alcohol
- Safety glass
- Salad bowls
- Shag rugs
- Shampoo
- Shaving cream
- Shoe polish
- Shoes
- Shower curtains
- Shower doors
- Skis
- Slacks
- Soap dishes
- Soft contact lenses
- Solvents
- Sports car bodies
- Sunglasses
- Sweaters
- Synthetic rubber
- Tape recorders
- Telephones
- Tennis rackets
- Tents
- Tires
- Tobacco pouches
- Toilet seats
- Tool boxes
- Tool racks
- Toothbrushes
- Toothpaste
- Transparent tape
- Trashbags
- TV cabinets
- Typewriter ribbons
- Umbrellas
- Unbreakable dishes
- Upholstery
- Vacuum bottles
- Vaporizers
- Vitamin capsules
- Water pipes
- Yarn

How was oil made?

1. **Simplified explanation:** The process of making oil began before the dinosaurs were even alive. Most of the earth was covered with water. When the plants and animals in the water died they were covered with sand and mud. Eventually that sand and mud turned into stone because of heat and pressure? (You will need to define pressure). The dead animals and plants were turned into oil. (*Stress that this process began to take place millions of years ago.*)

*The ABC's of Oil pamphlet is a good reference to this explanation.

2. Do popcorn activity on proceeding pages.

3. Follow up experiment by pointing out that with heat the popcorn kernel changed into something else. Heating the kernel caused the moisture inside to create pressure and the pressure forced the kernel to pop. Heat and pressure also made dead plants and animals turn into something else: oil.

Use the graphics in the JPEG folder "The ABC's of Oil".