

Lesson Plan
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Introduction: Our daily lives depend on petroleum products, the high "standard of living" in America, or the general lifestyle and economic condition of our society, is based on petroleum products. American Society revolves around the use of the personal automobile, and our homes are filled with products that are made from petroleum.

In 1993, Americans had 198 million vehicles on the road, and these vehicles consumed 115 billion gallons of gasoline and 28 billion gallons of diesel fuel. Fuel is need to power aircraft, tractors, and trains, and to heat and cool homes and factories. Petroleum is needed to produce nearly 3,000 other products. In this activity, you will observe a variety of familiar items. It will be your job to determine whether these items were made form petroleum or not.

Objectives: When you finish this activity you should be able to:

1. Describe the many uses of petroleum
2. Recognize man's daily dependence on petroleum-derived products
3. Recognize oil as a significant energy source

Materials: Notebook paper, pencil, poster size paper, markers, collection of materials (provided by teacher).

Procedure:

1. Form teams of two students
2. Observe the items teacher has assembled. Classify the collection of materials into one of two categories: Petroleum products; non-petroleum products
3. On a sheet of notebook paper, make two columns labeled "Petroleum products" and "Non-petroleum Products" List the items you observed in the appropriate column.
4. Combine teams to make groups of 4-6 students. As a group, make a poster showing which items were made from petroleum and which were not. Try to get all member of your group to agree on the list.
5. Your team will need to discuss the rationale behind the poster with the rest of the class.
6. After the poster presentation, answer the Interpretation Questions.

Interpretation Questions:

1. List the 5 most important uses of petroleum and/or petroleum products to you and your family.
2. Name 10 petroleum products you have used today. Which of these products would you be willing to give up?
3. If a petroleum shortage occurred, on what petroleum-based products could you cut back your usage or make replacements?
4. Explain why some people think the "standard of living" in America is based on the petroleum industry.
5. How are you and your family currently modifying your use of petroleum products?
6. In 2 paragraphs, write a short account of what might happen if there was suddenly no more petroleum.

PETROCHEMICAL PRODUCTS

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

Source: Oil Information Committee, Texas Mid-Continent Oil & Gas Association