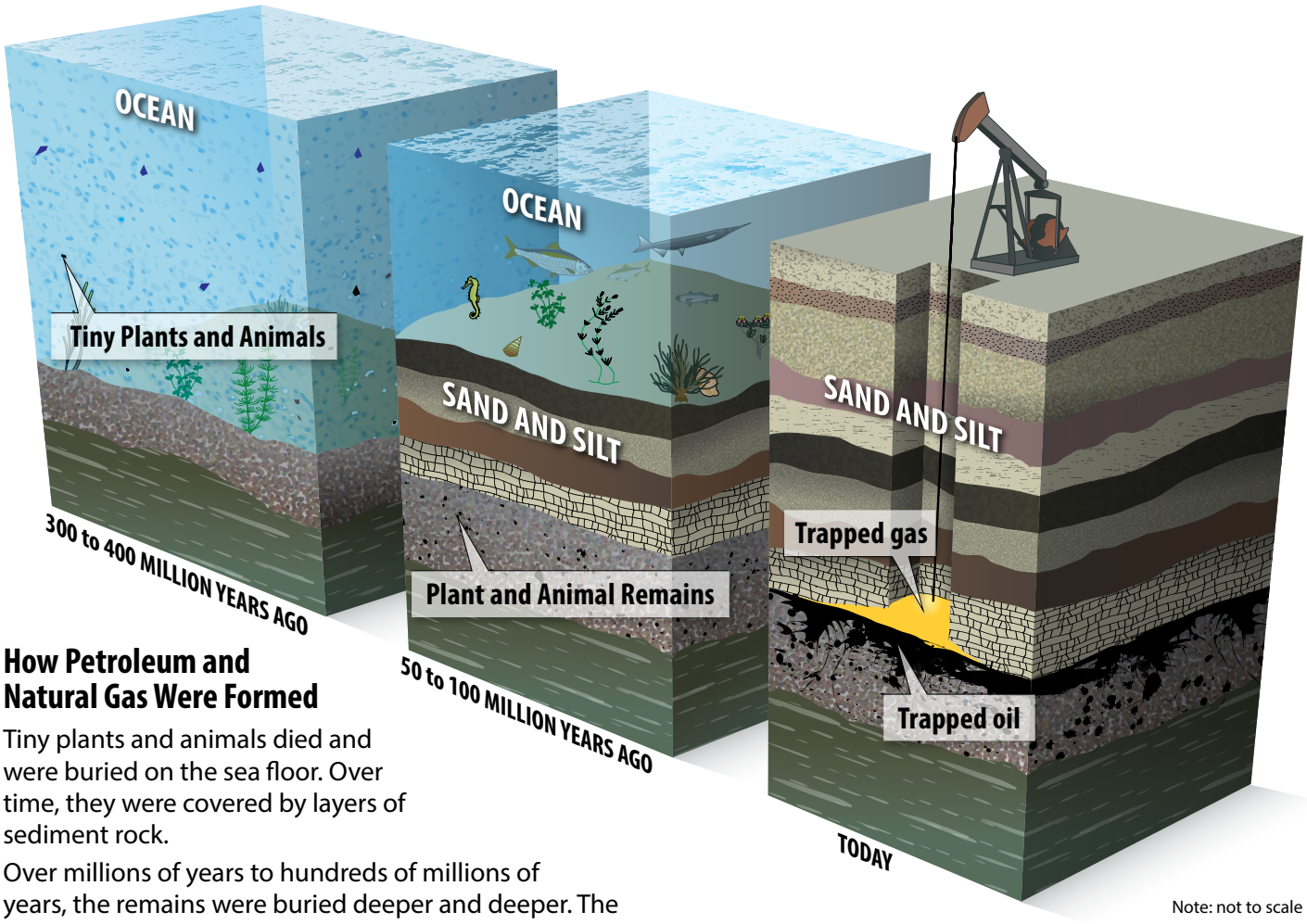
Petroleum



Note: not to scale

How Petroleum and Natural Gas Were Formed

Tiny plants and animals died and were buried on the sea floor. Over time, they were covered by layers of sediment rock.

Over millions of years to hundreds of millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned them into oil and gas.

Today, we drill down through layers of sedimentary rock to reach the rock formations that contain oil and gas deposits.

Petroleum is a liquid we find underground. Petroleum is nonrenewable.

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Petroleum

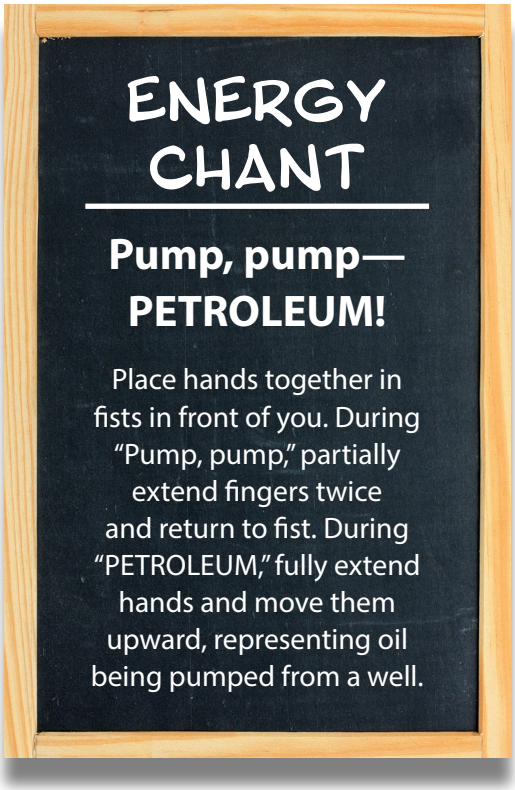
TEACHER

Petroleum is a liquid that is found underground. Sometimes we just call it oil or crude oil. Oil can be as thick and black as tar or as thin as water. Petroleum has a lot of energy. We can turn it into different fuels, such as gasoline, kerosene, and heating oil. Most plastics are made from petroleum, too.

People have burned oil for a long time. Long ago, they did not dig for it. They gathered oil that seeped from under the ground into ponds. It floated on the water.

Long before the dinosaurs, oceans covered most of the Earth. They were filled with tiny sea animals and plants. As the plants and animals died, they sank to the ocean floor. Sand covered them. Hundreds of millions of years passed. The weight of the sand and water and heat from the Earth turned them into petroleum and natural gas.

Petroleum is called a fossil fuel because it was made from the fossilized remains of plants and animals. The energy in petroleum came from the energy in the plants and animals that were once living and buried. That energy came from the sun.



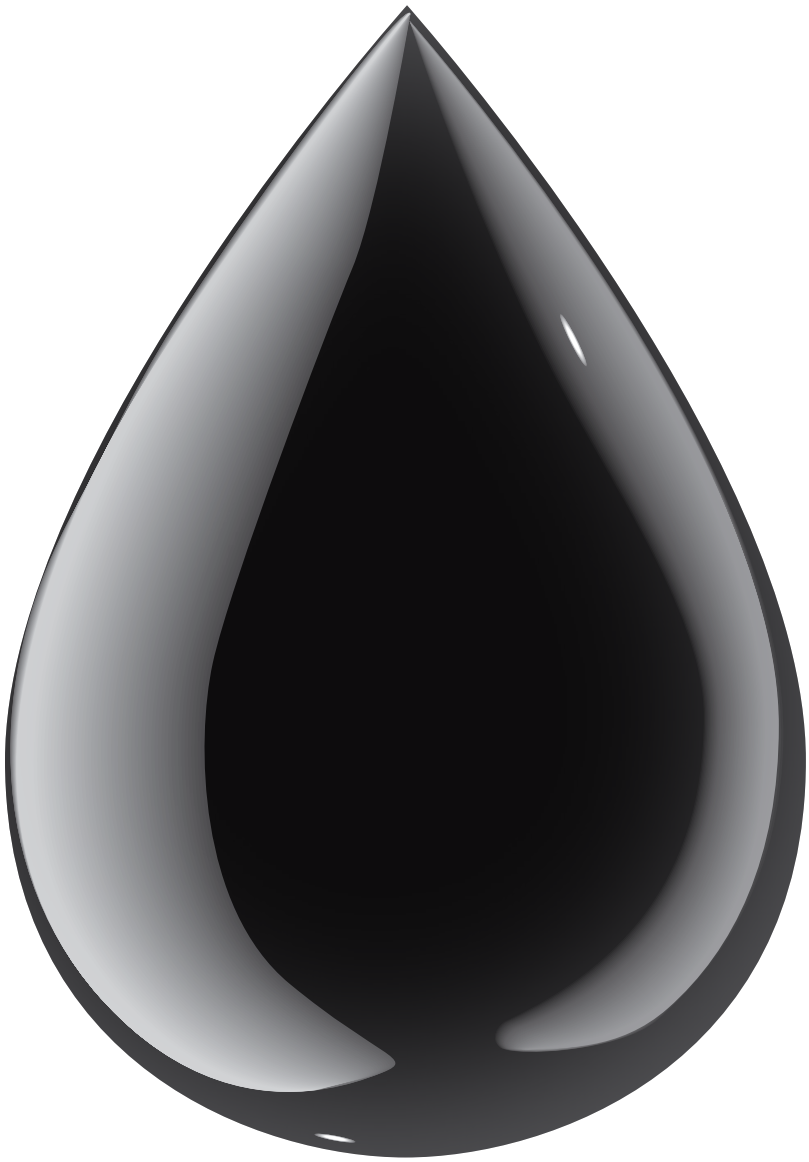
The petroleum we use today was made a very long time ago. It took hundreds of millions of years to form. We cannot make more in a short time. That is why we call petroleum nonrenewable. The United States does not drill enough oil to meet our needs. We buy 39 percent of the oil we use from other countries.

Petroleum is buried underground in tiny pockets in rocks. We drill **oil wells** into the rocks to pump out the oil. A normal well is over one mile deep. Texas is the state that drills the most oil. A lot of oil is under the oceans and along our shores. Offshore oil rigs are used to reach this oil. Most of these wells are in the Gulf of Mexico.

After the oil is drilled, it is sent to **refineries**. At the refineries, it is cleaned and made into different fuels. Most of the oil is made into **gasoline** for vehicles. The oil is moved from one place to another by ships and trucks and through pipelines.

Petroleum is used to fuel or create most of the things we see around us. Our cars, trucks, and planes all use fuel made from oil. Factories use oil to make plastics, paints, medicines, clothing fibers, and soaps. We sometimes even burn oil to make electricity. We use more petroleum than any other energy source. Petroleum provides 37 percent of our total U.S. energy.

Petroleum keeps us going, but it can damage our environment. Burning oil pollutes the air and creates carbon dioxide. Pollution from cars is a big problem in many parts of the country. Oil companies work to create cleaner gasoline and other fuels. Oil can also pollute the soil and water if it is spilled. Oil companies have to work hard to drill and ship oil as safely as possible.



Petroleum is also called oil.
It is a liquid when it comes from the ground.

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Image courtesy of Adobe Stock/photostock77

An oil rig on land.



Image courtesy of Joint Pipeline Office, Public domain, via Wikimedia Commons

An oil rig on water.

We drill to get the oil from the ground. Some wells are on land and some are below water.



Image courtesy of Adobe Stock/Vladimir

A tanker ship transports oil across the ocean.

We move oil in big ships called tankers. We also move oil in pipes under the ground.



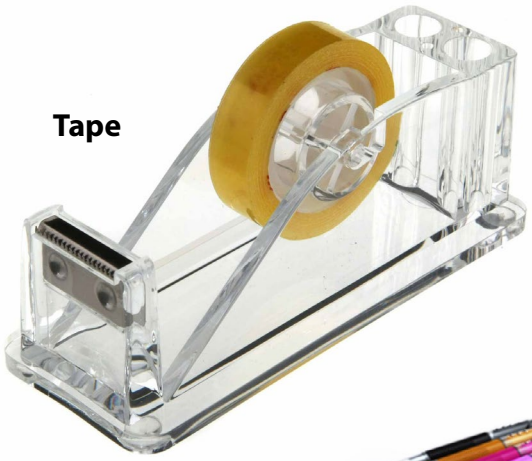
Lipstick



Action figures



Rubber bands



Tape



Plastic Balls



Pens

We use oil to make many different products.