

## THE STANDARD

# Energy & Fossil Fuels

*"Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment."*

 ANCHORING PHENOMENON

## The Light Switch That Reaches All the Way to a Mountain

Flip a switch and the lights come on. Easy. But trace that energy backward and the trail leaves the building. It might lead to a mountain scraped open for coal, or a valley flooded behind a giant dam. The light is simple. What it took to make it is not.

## DRIVING QUESTION

*"Where does the energy for our lights actually come from, and what did it change out in the world to get here?"*

 INVESTIGATIVE 1

### Wind and Sun That Never Run Out

Set a pinwheel in front of a fan and it spins as long as the air moves. Point a solar yard light at a sunny window and it charges every day. Use this to sharpen the anchor's question: some sources keep refilling. The wind blows again, the sun rises again.

## DRIVING QUESTION

*"Why can we use the wind and the sun over and over without ever running out of them?"*

 INVESTIGATIVE 2

### The Fuel You Can Only Burn Once

Fill a small jar with sand to stand for fuel pumped from the ground, then scoop some out each "day." The jar empties and never refills on its own. That is the other side: fossil fuels are non-renewable. Once we burn what we dug up, that batch is gone.

## DRIVING QUESTION

*"What happens when we keep using up a fuel that doesn't fill back up?"*