Understanding Fossil Fuels

OBJECTIVE
Students will create a comic strip to educate their peers about the history of fossil fuels and the origin of their name.

MATERIALS
- Device with internet access and the ability to project, one for the instructor
- Devices with internet access, enough for half the class
- Fossil Fuels Note Sheet, one per student
- Comic Strip handout, one per student
- Fossil Fuel Article printout, one per student

ENGAGE
- Ask students to raise their hand if they have heard the term “fossil fuel” before.
- Acknowledge that while it’s a term that most students have heard of, it’s also one that many people don't fully understand. Today, students will try to get to the bottom of it and help others understand it better, too!
- Write “Fossil” on the board and circle it. Give students a minute or two to tell you what they know about fossils, and record their ideas on lines coming out from this word.
- Then write “Fuel” on the board next to “Fossil” and circle it. Give students a minute or two to tell you what they know about fossils, and again record their ideas on lines coming out from this word.
- Finally, draw a larger circle around “Fossil Fuel.” Ask students to:
  - Look at what they knew about each of these words separately and consider what the two words could mean together.
  - Share anything else that they may already know about fossil fuels.
EXPLORE

- Tell students that they are eventually going to create a comic strip to help others understand what fossil fuels are, but first they will have some fun as they explore the subject more themselves.
- Explain that students will be playing a timeline game that requires them to read cards and look for clues as they investigate the history of fossil fuels.
- Prepare students for the activity by performing the following:
  - Project brainpop.com/games/timezonexfossilfuels for the class to view, and click the question mark in the top right corner. Play the video until the one-minute mark to explain what students will be doing.
  - Tell the class that their goal will be to place all of the cards about Fossil Fuels correctly in the timeline, so they can restore that part of history. As they do, they may be asked to place cards from other relevant categories into the timeline as well.
  - Divide students into pairs, and pass out one Fossil Fuels Note Sheet to each student.
  - Review the directions, and then instruct each pair to grab a device and begin!

Note: If devices with internet access are not available for pairs of students, you may instead complete the timeline activity as a full class.

APPLY

- Bring the class back together and encourage students to refer to their notes as they share what they learned about fossil fuels.
- Then distribute one Comic Strip handout to each pair. Read the directions provided, and stress that the comic should be fun and creative. Its main goal is to help viewers answer the question: What exactly are fossil fuels?
- Before students begin, show them where they can find:
  - The Fossil Fuel Article, in case they would like additional information to supplement what they have already learned.
  - Additional Comic Strip handouts in case they need more space for their comic.
- Encourage pairs to begin, and allow them to work until there are about 5-8 minutes left in the session.
- Wrap up by asking students to share their comic strip with another pair.
- Then conclude the session by challenging students to summarize in two sentences or less their new answer to: "What exactly is a fossil fuel?"
FOSSIL FUELS NOTE SHEET

Directions
As you play Brainpop’s Time Zone X: Fossil Fuels, jot facts around the web that help you better understand fossil fuels and their history.
FOSSIL FUELS COMIC

Directions
Apply what you learned about fossil fuels to create a comic that answers the question: What exactly are fossil fuels?
Your comic must include: 1) Where the name “fossil fuels” comes from, and 2) Key facts about the history of fossil fuels.