BioEscape

Bioenergy

the story

In the aftermath of the recent storm your remote town has just received a small power plant that is powered by biofuels. You have already been 18 hours without electricity and your food is about to spoil. Unfortunately as the engineers unpack the power plant a gust of wind blows away the set up instructions. All you are left with is a jump drive and a locked biomass box with a spare set of instructions and a valuable biofuel. Explore the reusable resources provided to solve the codes and access what is needed before it's too late!

materials needed

❏ escape box(es) or your Breakout Edu Kit(s)

❏ hasp

❏ locks - 3 digit, 4 digital, directional and alphabetical

❏ jump drive (optional)

❏ Pop Rocks "biofuel" to place in the box

Gather and print the following resources - one set needed for each team

❏ load the videos on a jump drive or print QR codes
  ❏ Energy 101: Biofuels   Energy 101: Feedstocks for Biofuels and More

❏ print out the dice clues for the 4 digit lock

❏ print the map for the directional lock

❏ place the biofuel samples in ziplock bags with a hidden letter in each bag spelling - fuels

set the locks

3 digit lock - 101

4 digit lock - 4535

directional lock -D(down), R(right),L(left), R(right), D(down)

alphabetical lock - fuels

escaping

❑ You can show the videos as a whole class or students can watch as a team.

❑ Set the time for 30 minutes.

❑ Don't provide hints or answer questions until the timer is under 25 minutes.

❑ Reflection time - focus can be content or the process.