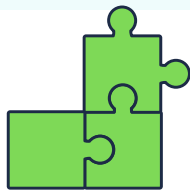
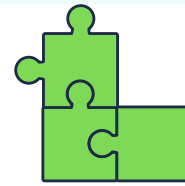


NAME:

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BRINGING ALL TOGETHER



OBJECTIVE Upon successful completion of this lesson you will be able to:

- Demonstrate the ability to use energy to break chemical bonds by using the H2DIY Kit;
- Facilitate the generation of electricity through the process of chemical reaction using the H2DIY Kit;
- Understand what electrolysis is and how it is used to split water;
- Effectively assemble the DIY chassis;
- Analyze and interpret the various applications of hydrogen including energy storage and transportation.



Define the process and aim of electrolysis:

Now that you know what hydrogen is and how to produce it you can use this knowledge to produce electricity using the Fuel Cell. The electrolyzer in this kit can be used as a Fuel Cell by injecting it with the hydrogen and oxygen you produced in the previous lesson.



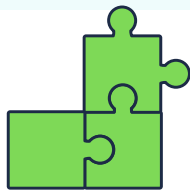
Follow the instruction provided in the DIY Chassis Assembly Presentation and/or watch the video for more specific instructions. Once you have assembled the chassis combine it with the DIY Fuel Cell (electrolyzer) science kit you put together in the previous lesson and connect it to the car as its energy source.

What are some other examples of applications you can think of for using hydrogen as a source of energy?

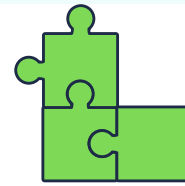
How is hydrogen used in transportation?

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BRINGING ALL TOGETHER



Explain why hydrogen is used instead of oxygen to power fuel cell cars:

**TAKE
THE
TEST!**

How much have you learned about Fuel Cells?

<https://www.energy.gov/maps/quiz-how-much-do-you-know-about-hydrogen-and-fuel-cells>



You did a great job!



RESOURCES: US DEPARTMENT OF ENERGY 101 VIDEOS ON YOUTUBE.

Energy 101 Geothermal: <https://youtu.be/mCRDf7QxjDk>

Energy 101 Wind Power: <https://youtu.be/EYYHfMCw-FI>

Energy 101 Solar PV: <https://youtu.be/EYYHfMCw-FI>

Energy 101 Biofuel: <https://youtu.be/-ck3FYVNI6s>