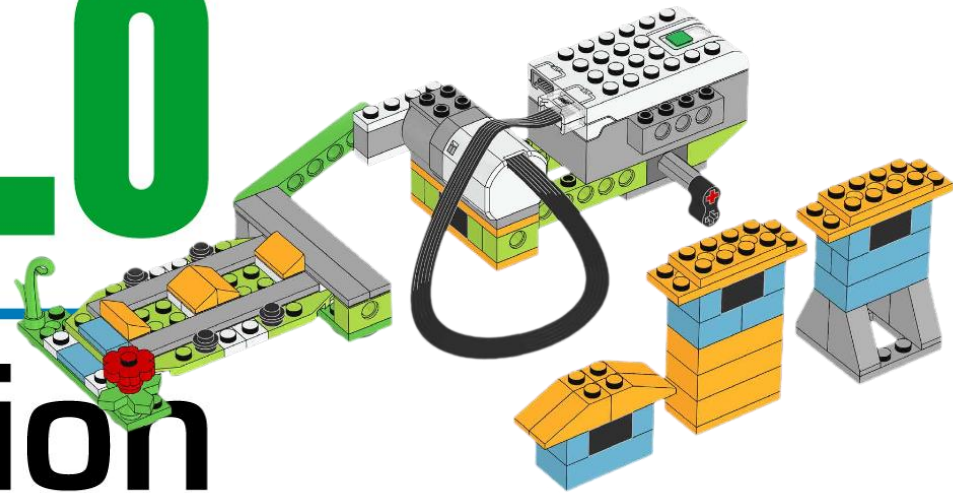


# WeDo 2.0



**education**



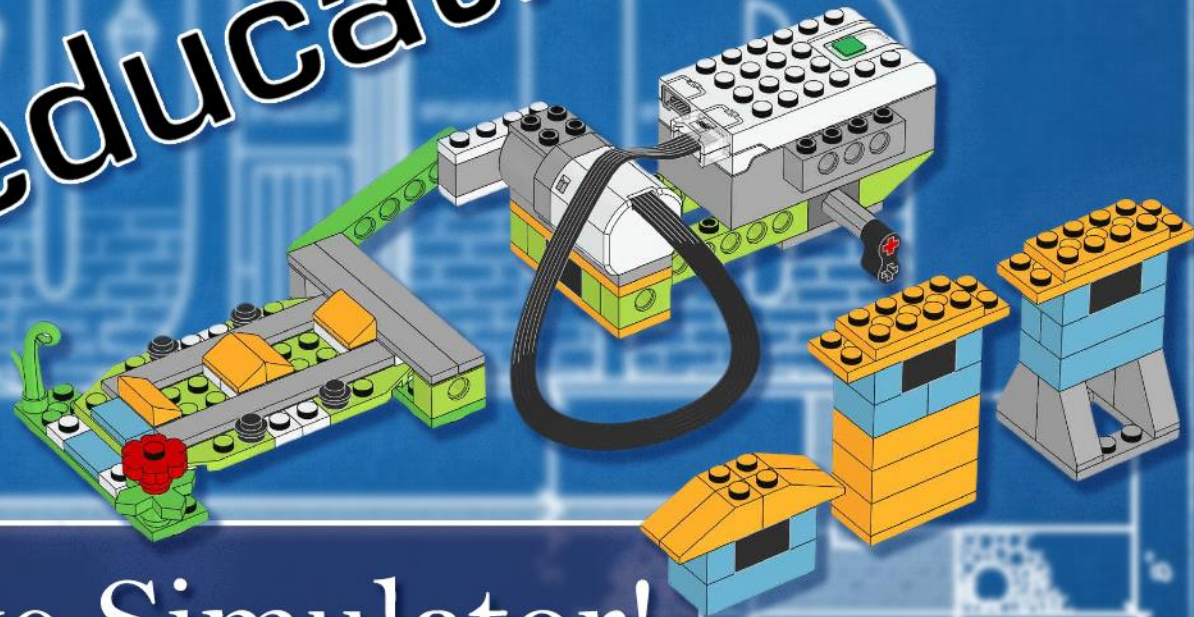
**Lesson: Earthquake Simulator**

BUILD (VERB)  
I. CONSTRUCT BY PUTTING PARTS  
OR MATERIAL TOGETHER OVER A  
PERIOD OF TIME.

# WEDO 2.0



## education



# Earthquake Simulator!



# EARTHQUAKES

Earthquakes! What in the world are they?! And what causes them in the first place?!





## earth·quake:

a sudden and violent shaking of the ground, sometimes causing great destruction, as a result of movements within the earth's crust or volcanic action.

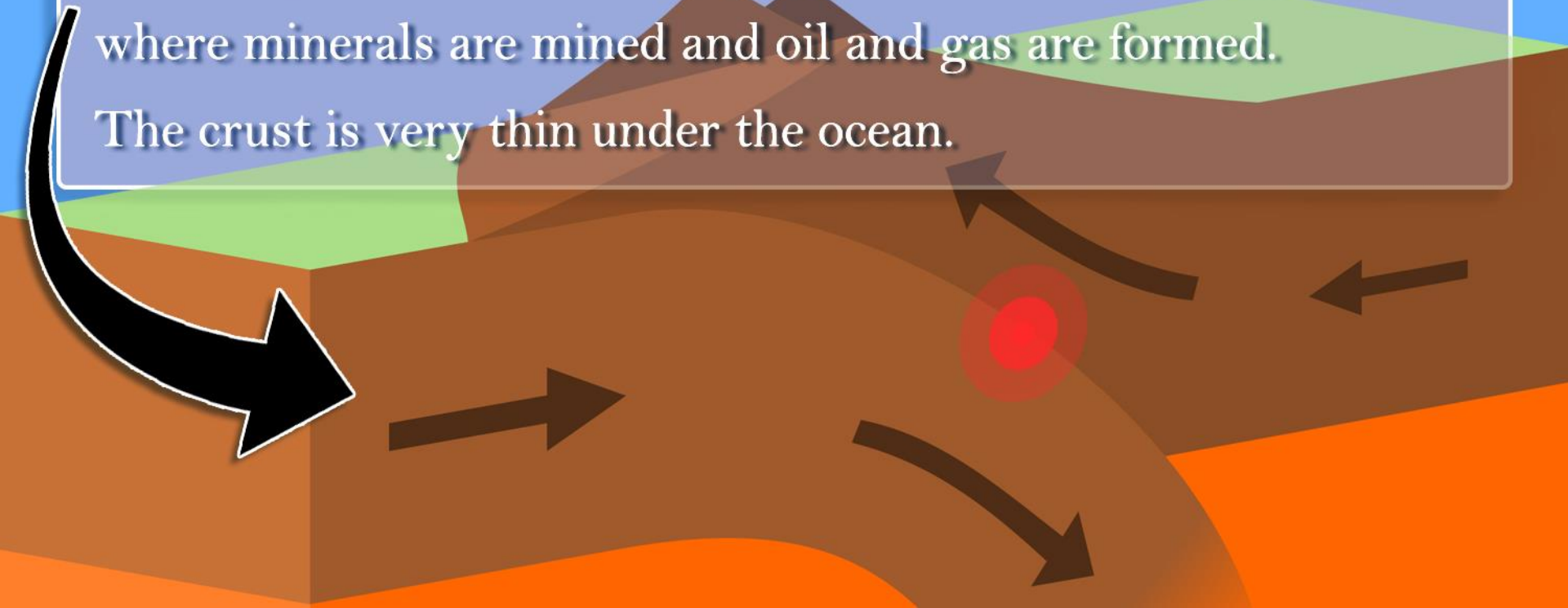
But what do you mean by movements within the earth's crust? Does the ground move in some mysterious way?

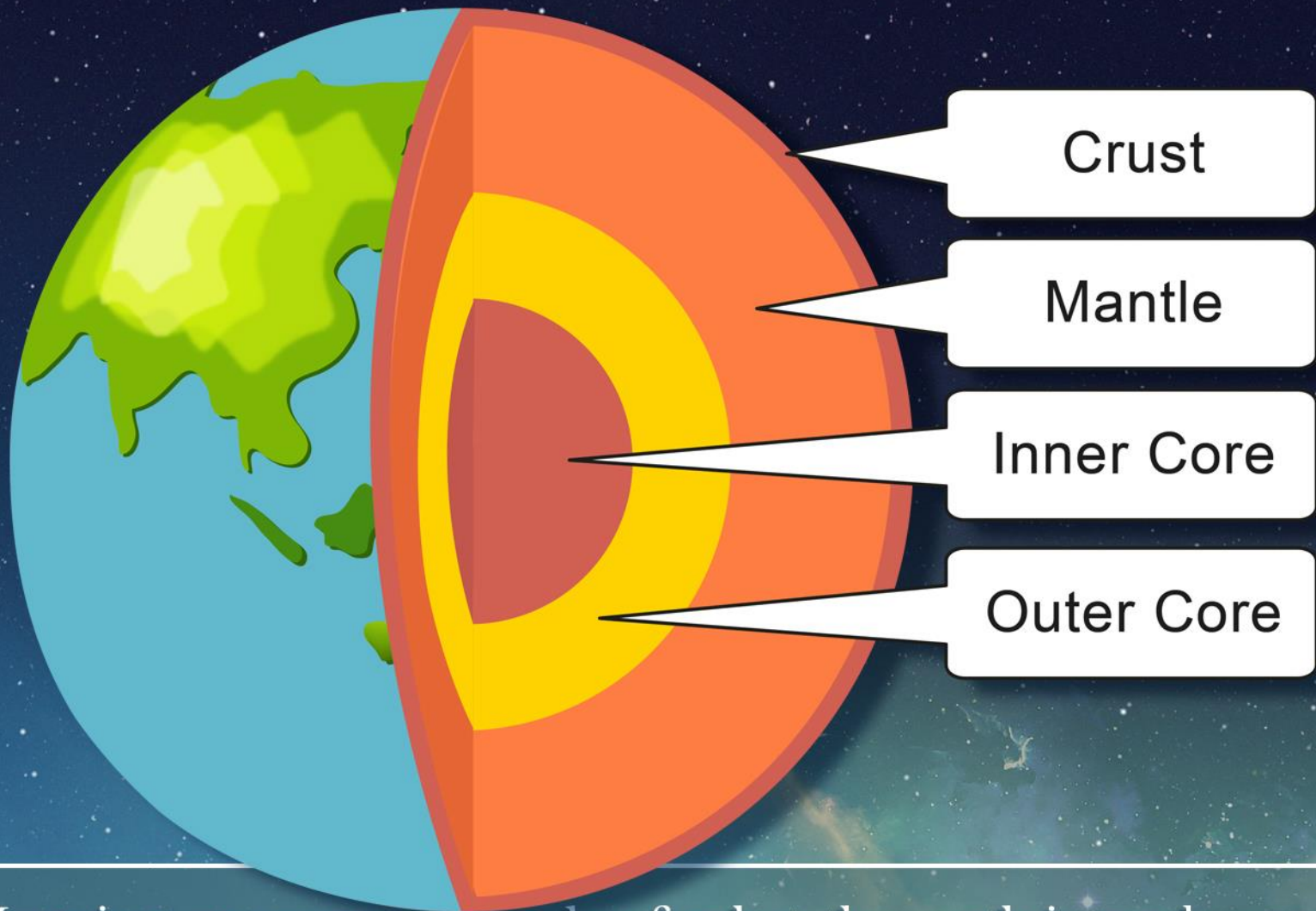


The ground that you walk on isn't as solid and unmoving as you would imagine. The ground is actually made up of massive tectonic plates that cover the planet! These plates are also called the earth's crust.

The earth's crust includes the layer you can walk on, and is home to plants, animals, and soil. It also includes deeper areas where minerals are mined and oil and gas are formed.

The crust is very thin under the ocean.





Here is a awesome example of what the earth is made up of. After the Crust, there are 3 other layers that make up the Earth. Each layer gets hotter and even more hotter!





A earthquake happens when two tectonic plates move towards each other and overlap each other. The overlapping friction of these two plates causes the earth's crust to become violently unpredictable, shaking the ground out of control.





Here are some scary examples of the destruction that earthquakes can cause to near by buildings! Even though buildings may look and feel sturdy and strong, many old buildings are not earthquake proof. Modern buildings are better designed and created to handle earthquakes.





Here are some examples of what are called earthquake simulators. Engineers have designed moving platforms that mimic the destructive effects of earthquakes.

Can you guess why engineers would create a machine that copies the effects of earthquakes? Afterwards, actual buildings are made to be shaken by the simulators!







Now let's watch some videos of real life earthquake simulators in action!

<https://www.youtube.com/watch?v=zSIMZUdSOsM>



