## Tectonics Tuesday

A free teacher appreciation printable from LearnEd Notebooks


## www.learnednotebooks.com

Follow us on Facebook, Instagram and Pinterest to register for our giveaway

# Modeling Plate Tectonics 

Activity from LearnEd Notebooks
www.learnednotebooks.com
In this experiment, you will use a sandwich cookie to represent the layers of the Earth. The upper cookie will represent the crust (lithosphere) and the cookie filling will represent the mantle.

Activity 1 :

- Take one cookie and remove the top cookie with a twisting motion
- Break the top cookie layer in half and put it back down on top of the filling
- Take the two cookie pieces and begin moving them toward each other

1. What effect does this motion have on the top cookie pieces?
2. What effect does this motion have on the cookie filling? $\qquad$
3. Which type of boundary does this represent?

Activity 2 :

- Take a new cookie and remove the top cookie layer
- Break the top cookie in half and place it back down on top of the filling
- With the cookie pieces touching in the center, begin to slide them horizontally past each other

1. What effect does this motion have on the cookie pieces? $\qquad$
2. What effect does this motion have on the filling? $\qquad$
$\qquad$
3. Which type of boundary does this represent? $\qquad$

Activity 3 :

- Take a new cookie and remove the top cookie layer
- Break the top cookie in half and place it back down on top of the filling
- With the cookie pieces touching in the center, slowly move them apart

1. What effect does this motion have on the cookie pieces?
2. What effect does this have on the filling? $\qquad$
3. Since the filling represents the mantle, what effect would a separation of crust have on magma?
4. Which type of boundary does this represent?

Draw a diagram of what happened to your cookie during each of the three experiments. Include labels and arrows to represent what occurred as a result of the movement.

