

Build Your Own Brain Hands-On Activity

Part 1: Getting Started

Let's make a brain! This fun activity will help your child learn the parts of the brain by creating his or her own model with play dough. If you do not have play dough, here is a recipe to make your own:

Play Dough Recipe

- 1 cup flour
- $\frac{1}{2}$ cup salt
- 1 cup water
- 1 tablespoon oil
- 2 teaspoons cream of tartar

- 1) Mix all ingredients in a sauce pan and cook over low/medium heat until play dough is completely formed and is no longer sticky.
- 2) Allow to cool slightly, then divide dough into four equal parts.
- 3) Add a different colored drop of food coloring to each part and firmly knead the dough to create four different colors of play dough.
- 4) Allow play dough to cool before storing in an airtight container.

* Makes enough for one model of the brain

Part 2: Procedure

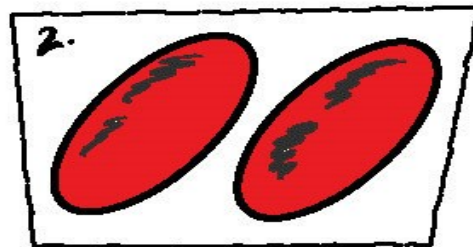
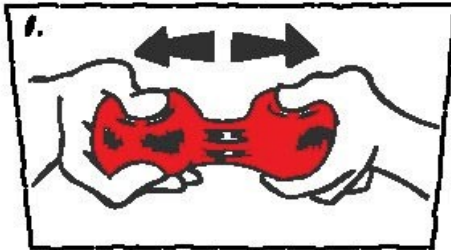
Once you have made four colors of play dough, you and your child are ready to make a brain! Use the instructions on the next page to guide your child through this activity. The last page of this document shows pictures of the brain that will help your child learn about its parts and functions. Encourage your child to write down what he or she learned about the brain on the log sheet provided.

Build Your Own Brain!

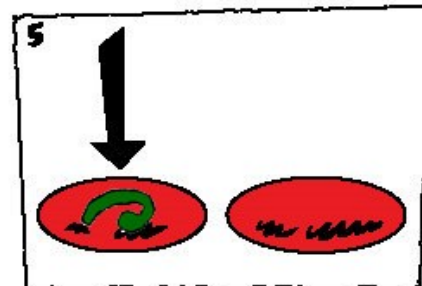


Okay, kids - let's get started! Here are the instructions you need to build your own brain:

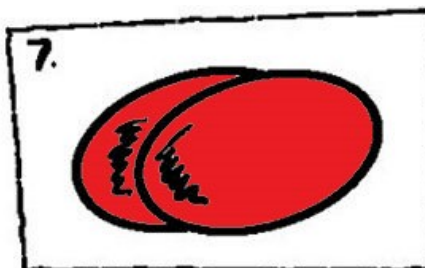
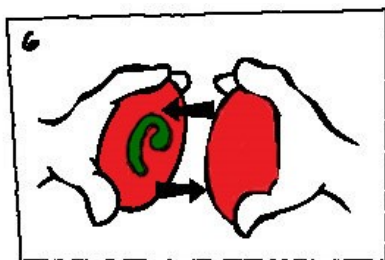
1. Take a clump of one color of play dough. Split it into two parts that are the same size.
2. Roll each part into an oval. These two ovals will form the parts of your brain called hemispheres. You can use your fingernails to make wrinkles on the hemispheres.



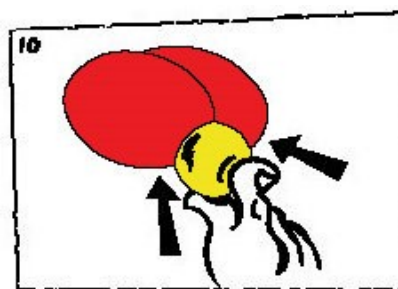
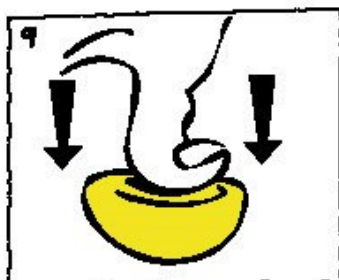
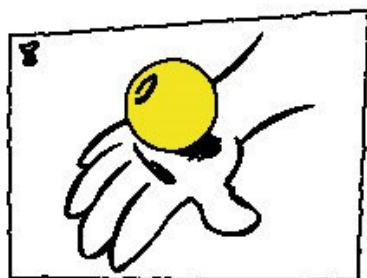
3. Now, form the limbic system with a different color of play dough. Make a small piece that is shaped like a bean (step 4). Lay the bean down on one of the hemispheres (step 5). Now press the two hemispheres together (6) to show that the limbic system is located inside the cerebral cortex (7).



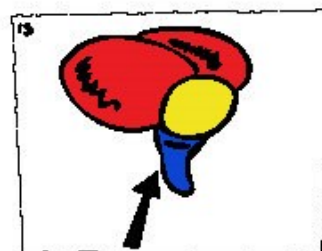
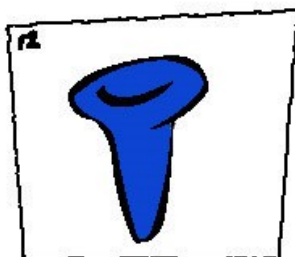
Station 2: Brainville



8. Use a third color of dough to make the cerebellum. Make a ball that is smaller than one of the hemispheres. Flatten the ball a little with your thumb (step 9). Put the ball on the bottom and underneath the hemispheres (10).



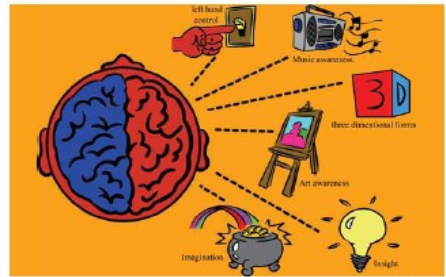
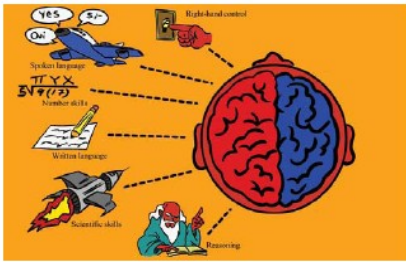
11. Use a fourth color of play dough to make the brain stem. The brain stem kind of looks like a trumpet (step 12). Make a trumpet shape and stick it at the bottom of the cerebellum (13).



Congratulations! You've now built a model of the brain!

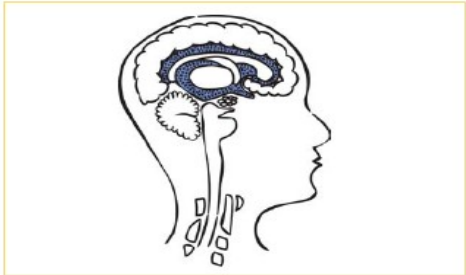
Parts of the Brain Cards

Use these pictures of the brain to help you learn about its parts and functions.

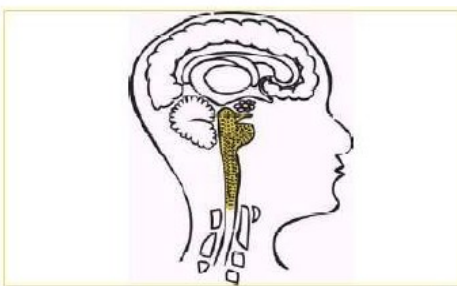


The left half of your brain is your thinking side. This is where your talent for math and talking comes from. The left half of the brain also controls movement on the right side of the body.

The right half of your brain is your artistic side. This is where your talent for painting or drawing comes from. The right half of the brain also controls movement on the left side of the body.



The limbic system is a special spot deep inside the brain. The limbic system is where your emotions live. Can you name some emotions? Memories also live in the limbic system.



The brain stem tells your body to do all the things you need to do to live—breathe, pump blood, sleep, wake up, and digest food. Most of the time, you don't even know it's doing all that work! Your brain stem is only 3 inches long. Can you find it?



Cerebellum means "little brain." The cerebellum helps you jump, walk, play ball, and pick things up. It controls all of your movements and balance. Your cerebellum is the reason you don't fall over all the time!

The brain stem is in the back, just above where the head and the neck join.

There are many emotions, like happiness, sadness, anger, embarrassment, and joy.

Log Sheet



Name: _____

What parts of the brain I learned about

What I know about each part

What else I would like to learn about the brain