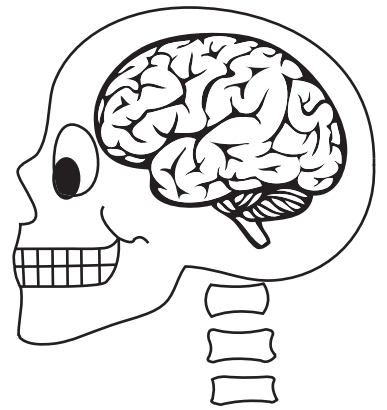




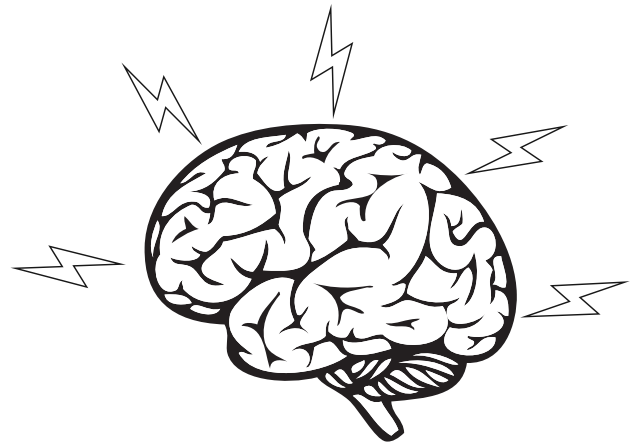
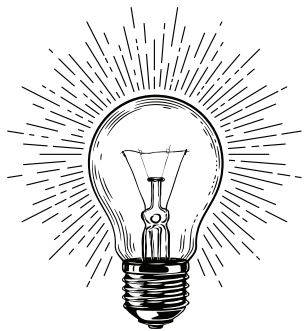


Bones are super hard and their main job is to protect our soft bits, like our brain. Our brain is super squishy, and fits perfectly into our CRANIUM, the round part of our skull that is under our hair. All animals with skulls have a cranium also, where THEIR brains fit.



The horns and hooves of some animals are also left behind when they die as parts of their complete skeleton. Horns and antlers are made of bone too and are part of the animal's skull. Can you name some animals with horns? How about with hooves?

Our brains control the rest of our body. We can live without our legs, arms, and a few of our organs, but we will die without our brains. Just like a lightbulb, our brain sends electricity to the rest of our body. With the right machine, we can even SEE the electricity "lighting up" parts of our brain. It looks like tiny lightning bolts!



**Lesson Objectives** By the end of this lesson, the children should be able to:

- Know that the brain "powers our entire body
- Know that the CRANIUM protects the brain
- Identify and palpate the CRANIUM
- Know that all animals have brains
- Know that the brain is electric

**Materials**

- Pages with SKULL and BRAIN
- Scissors
- Crayons
- All natural white face paint
- Triangular makeup sponges or larger sized paint brush
- Flashlight and batteries

**Lesson Prep**

- Cut out SKULL and BRAIN
- Cue up the "Freeze Dance" song (see link in "Notes")

**Greeting Routine** (for more than 2 children) Free play until everyone arrives**Mat Time** "SIMON SAYS" BRAIN GAME

"I'm going to say "Simon says...wiggle your toes!" As long as I say the words "Simon Says..." you do what I say. If I don't say those words exactly, don't do the action! Okay? Does everyone know how to play this game? You all are going to use your brains to tell if you should do the action or not." Be sure to use phrases like: "Simon Says...shake your CRANIUM!" If the kids seem up for it, have them take turns being "Simon".

**Reading Time**

Read book 2, *Bones Have Feelings, Too!*

**Activity in Motion** FREEZE DANCE PARTY

Cue up your FREEZE DANCE PARTY song. Explain to the kids that we are going to use our brains to "freeze" us when we hear the word, "FREEZE," in the music.

## Lesson

"Everyone show me where your brain is... Wow! You all are so smart. Why don't you "kiss your brain" to thank it for being so smart!" Show them how to kiss their fingertips (like they are blowing a kiss) and then pat themselves on the top of the head. Everytime a child surprises you with an awesome answer, try to think of having them "Kiss Their Brain". Does anyone know where your brain is? That's right!" Point to your head. "It's inside the CRANIUM. Everyone say 'Cranium'. The cranium is the part of our skull that protects our brain. For the most part, it is under our hair." Show the skull with brain image. "Our brain is super important! It controls everything we do, and I mean everything! Like breathing, blinking, talking, seeing, laughing, everything! Almost every living thing has some sort of brain that controls everything in the rest of the body. What are some animals with brains?" Every answer is correct. "Hmm." Hold up an empty flashlight. "I can't seem to get this flashlight to work. What could be wrong?"

Wait for kids; see if they can guess. "Well, it's not broken. Now look what I've found!" Take the battery that you've had hidden and show it to the kids. Put it in the flashlight and turn it on. "Your brain is like the battery in this flashlight. It powers your body! Without our brains, our bodies wouldn't work at all." Pass around the flashlight without batteries and ask them if it works. Then load the batteries and pass it around again, encouraging kids to turn it on and off once and then pass it to the next person.

## Chant ECHO GAME

"I'm going to say the name of a bone, and you all are going to be my echo! If I say it LOUD you say it LOUD. If I say it SOFT, you say it SOFT. Okay?" Point to the top of your head and chant, "CRANIUM, CRANIUM!" Have them repeat it back to you. Experiment with a silly tone, a growly tone etc. Say the words in as many different ways as you can. (While you are chanting, review the "HUMERUS, RADIUS and ULNA" chants, too.)

## My Body Project

Have each child identify and paste the SKULL on the bones side of the contractor paper. The other side will be for organs and this other side is where the BRAIN will go.

Glue the top part of the cranium to the **bones side** of the body project. Leave the bottom of the cranium (around the teeth) without glue so that the jaw can be glued below it in the next few lessons. Glue the top part of the brain to the **organs side**. Leave the bottom of the brain free of glue so that the brain stem can be glued underneath in the future.

## Activity in Motion

Recite the "Brain Poem" while doing the actions. Teach the actions to the children and have them follow along with you.

### Brain Poem

Our brain's biggest job is to help us to think.  
(point to head with both hands)

It does little things too, like helps us to blink.  
(place duck hands in front of eyes, open and close hands)

We may not even know it, but our brain makes us breathe  
(hands on ribs, inhale and exhale deeply)

It makes sure we can hear, can taste, smell and see.  
(point to ears, tongue, nose, and eyes)

We must use our brain to run jump and sing  
(run in place, jump a little, using singing voice)

Why our brain helps us do almost everything!  
(use arms together going up then out and around)

## Activity

Paint with makeup sponges or a thick paint brush on kids' faces to represent their SKULL. This can be as simple or as elaborate as you'd like to make it. With multiple children, fast and easy is usually the way to go.

## Lesson Review

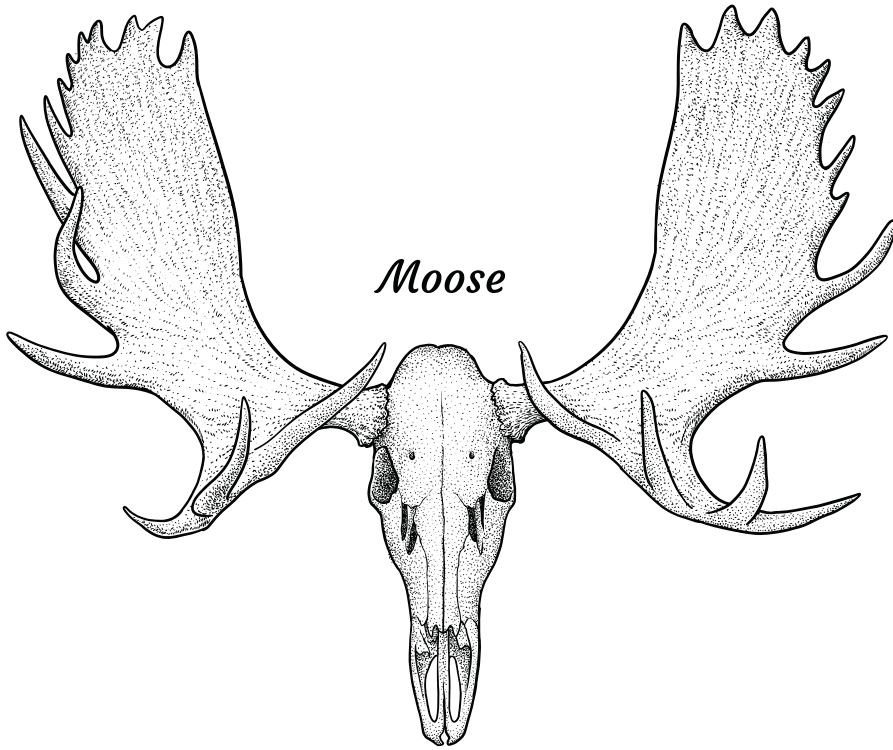
"What part of your skeleton protects your BRAIN?" (Skull and cranium are the answers you should prompt.) "Your BRAIN is like a battery. It has the same electricity that lights the flashlight but inside your SKULL! Yes, your brain is electric, and the same thing that lights up the lights in your house is in your brain too! Do most all living things have a brain? Yes, that's right. The brain tells the rest of the body what to do. It is 'the boss' of your entire body. What are some things that your brain does?" If the kids answer on their own, any answer will end up being correct. Remind them that their brain breathes for them so that they don't have to think about breathing all day long.

## Activity

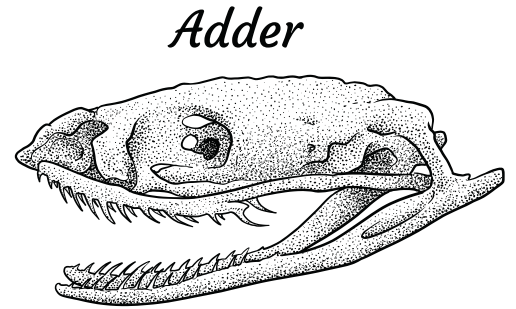
Optional: Brain Hat and Playdough Brain

## Notes

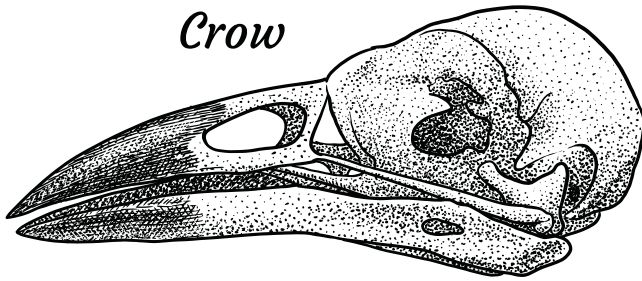
Link to "Freeze Dance" by The Kiboomers:  
<https://www.youtube.com/watch?v=2UcZWXvgMZE>



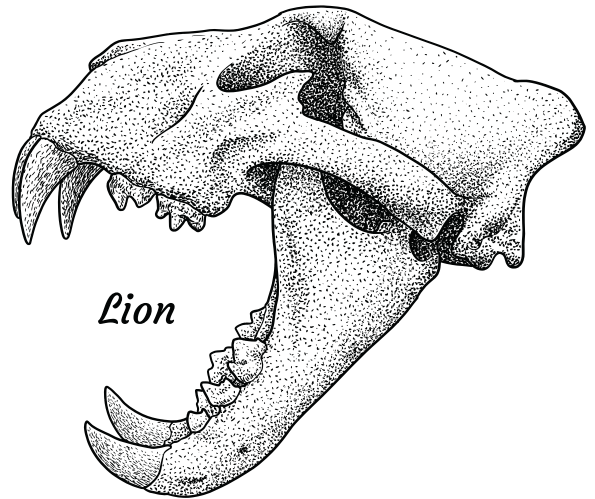
*Moose*



*Adder*



*Crow*

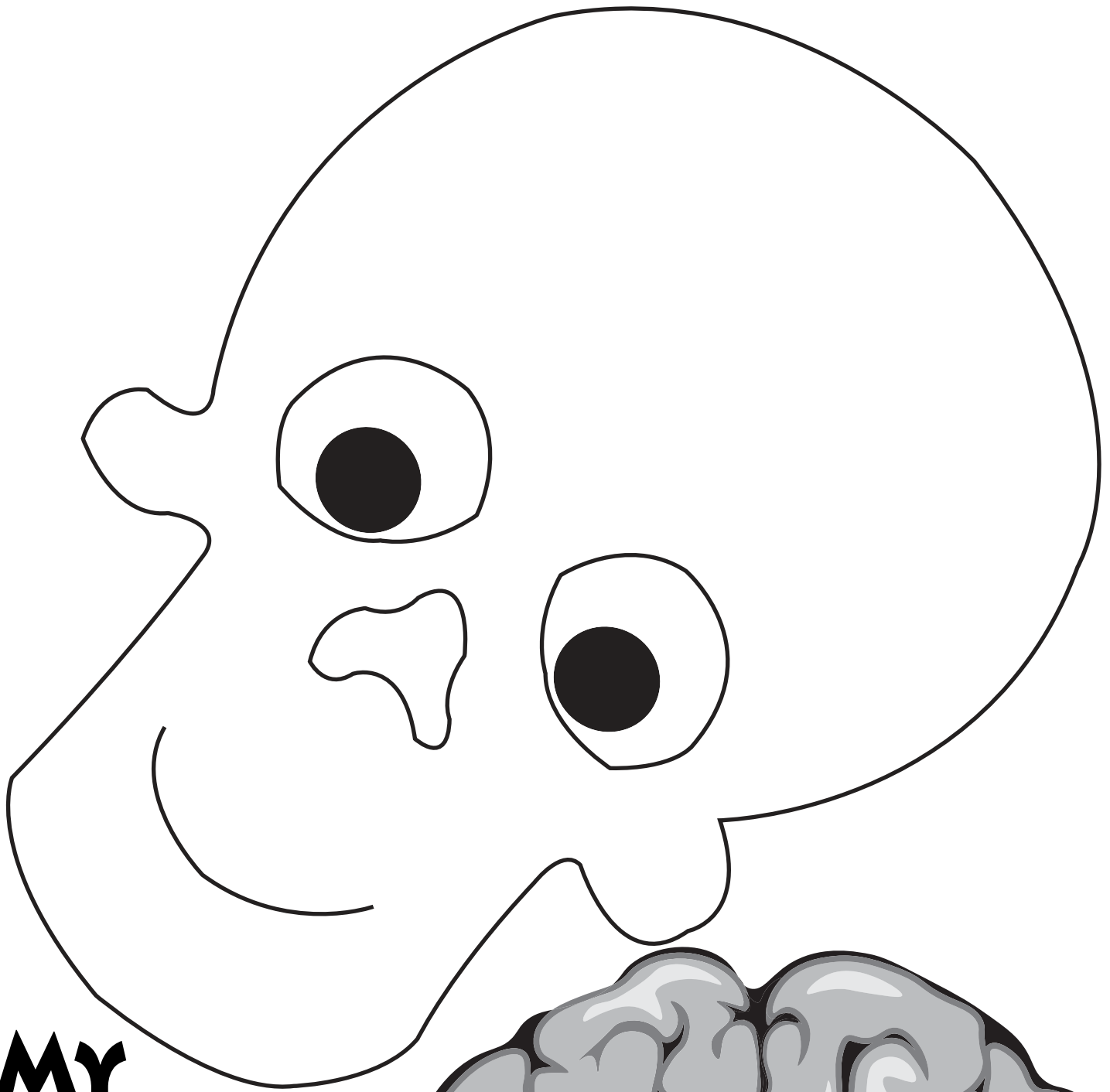


*Lion*

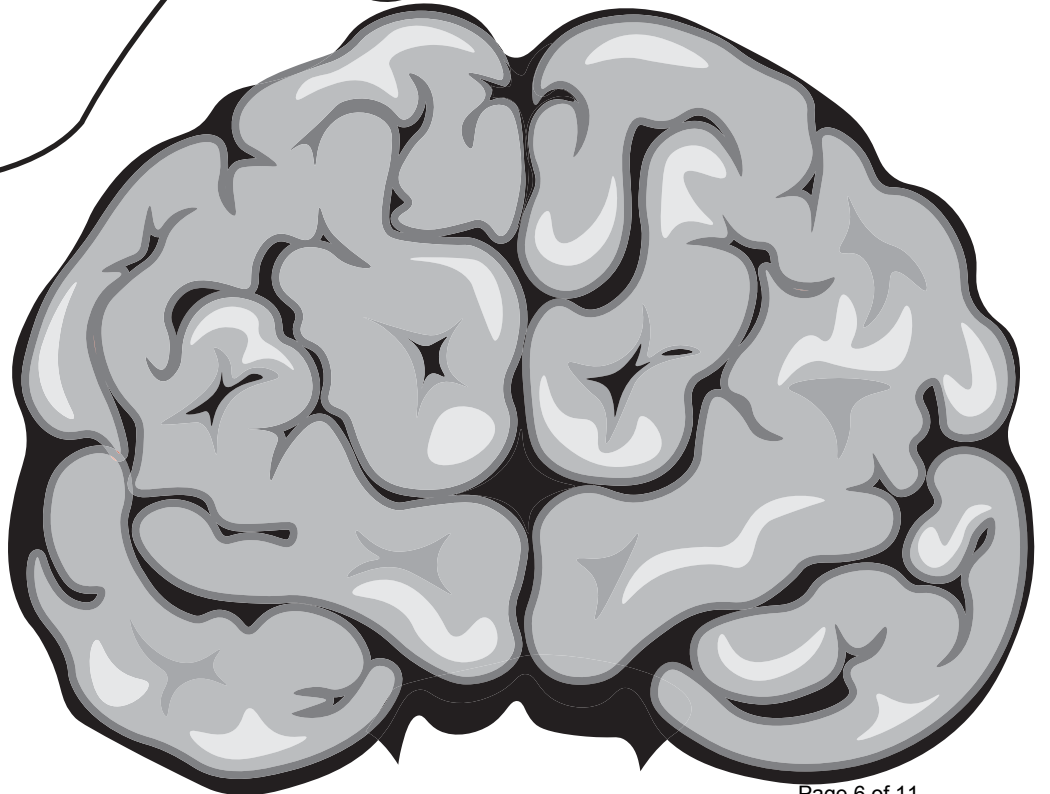
**CAN YOU GUESS WHAT ANIMALS THESE SKULLS BELONG TO?**

**CAN YOU FIND AND COLOR THE PART THAT COULD BE THE CRANIUM?**





**MY  
BODY  
PROJECT**

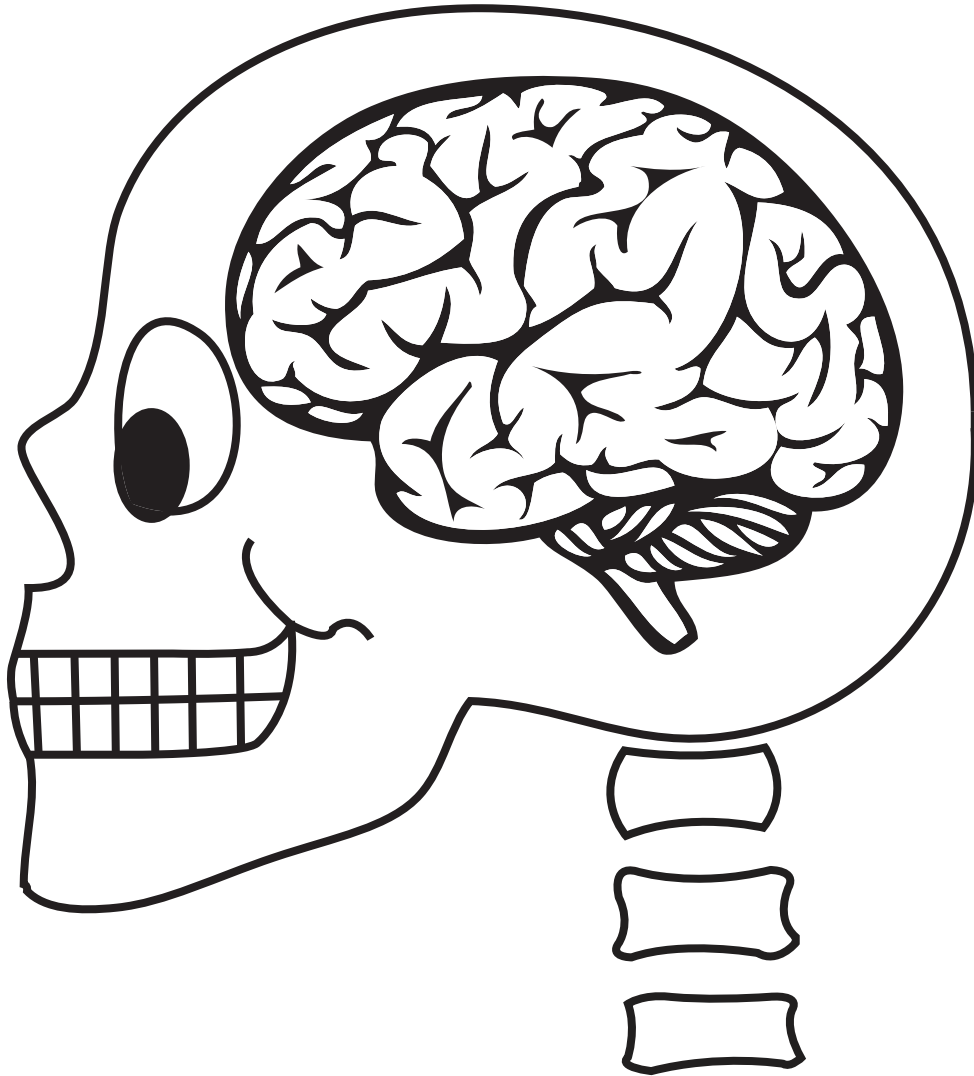


TEETH IN  
LESSON 6



**COLOR THE CRANIUM GREEN**



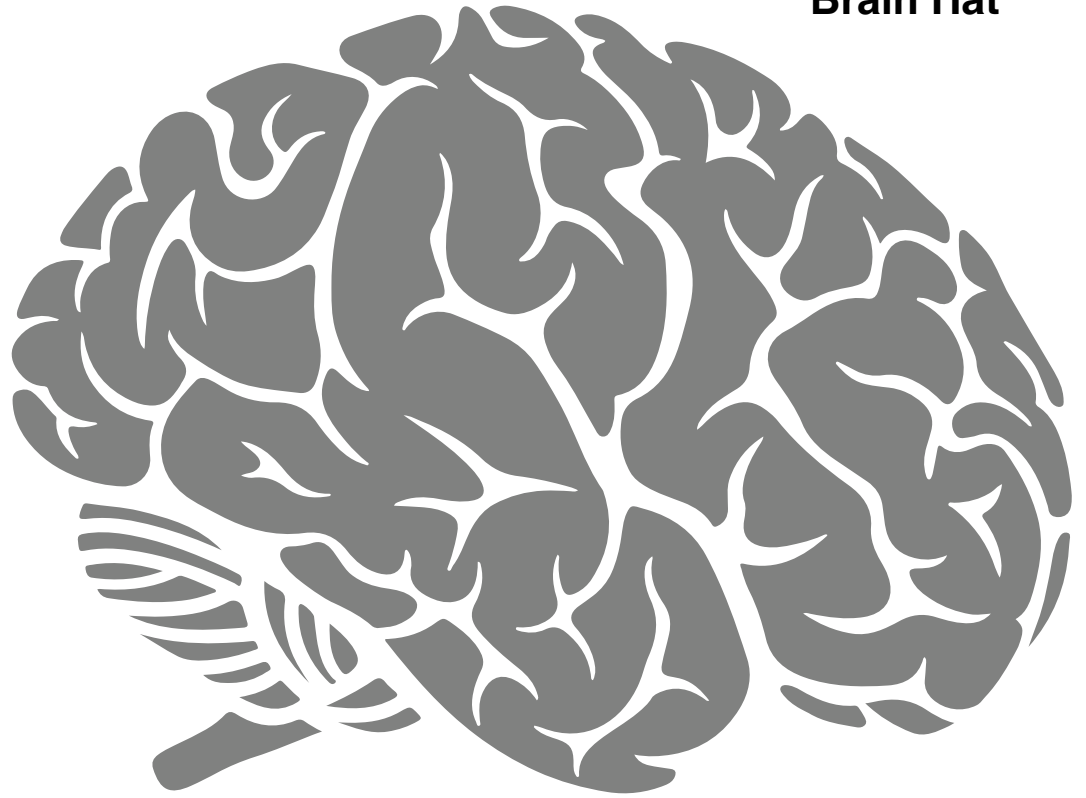


**A SKULL ISN'T JUST WHAT'S UNDER A FACE,  
IT GIVES THE BRAIN A NICE HARD CASE!**

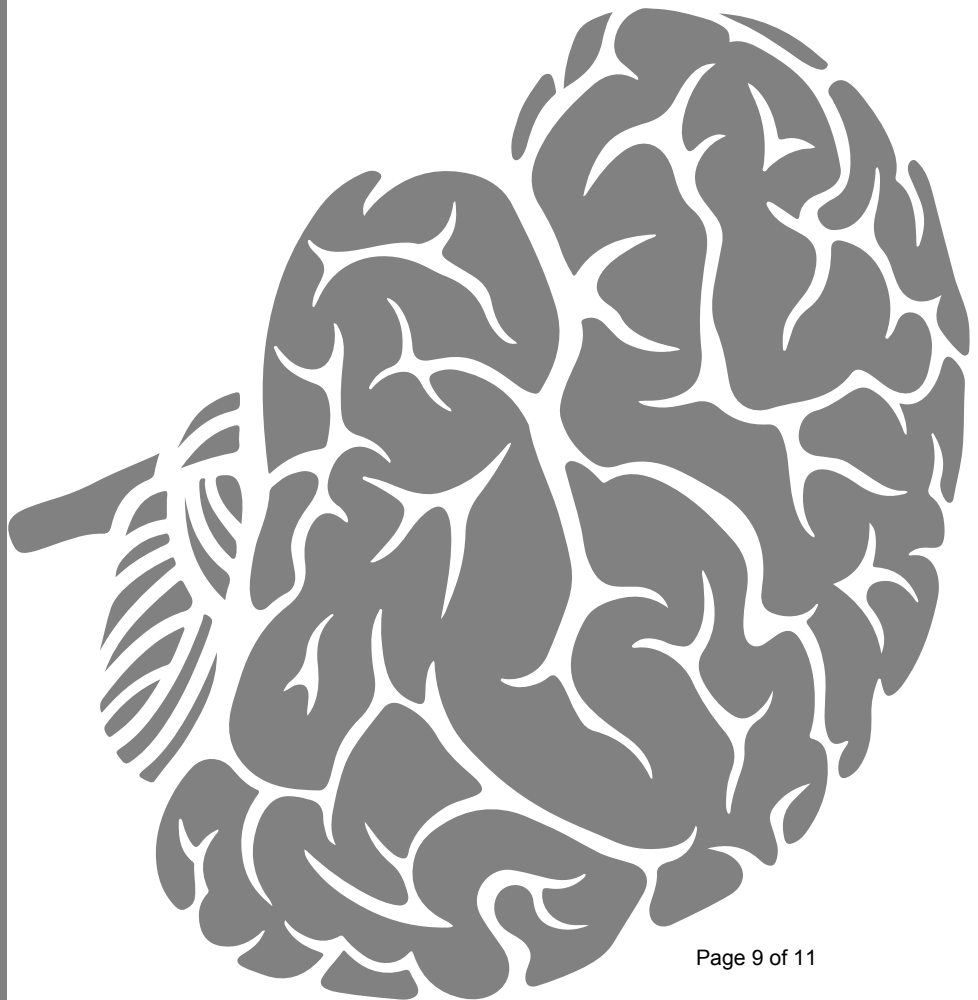
**COLOR THE BRAIN PINK**



## Brain Hat



**MATERIALS: TAPE OR  
STAPLES**

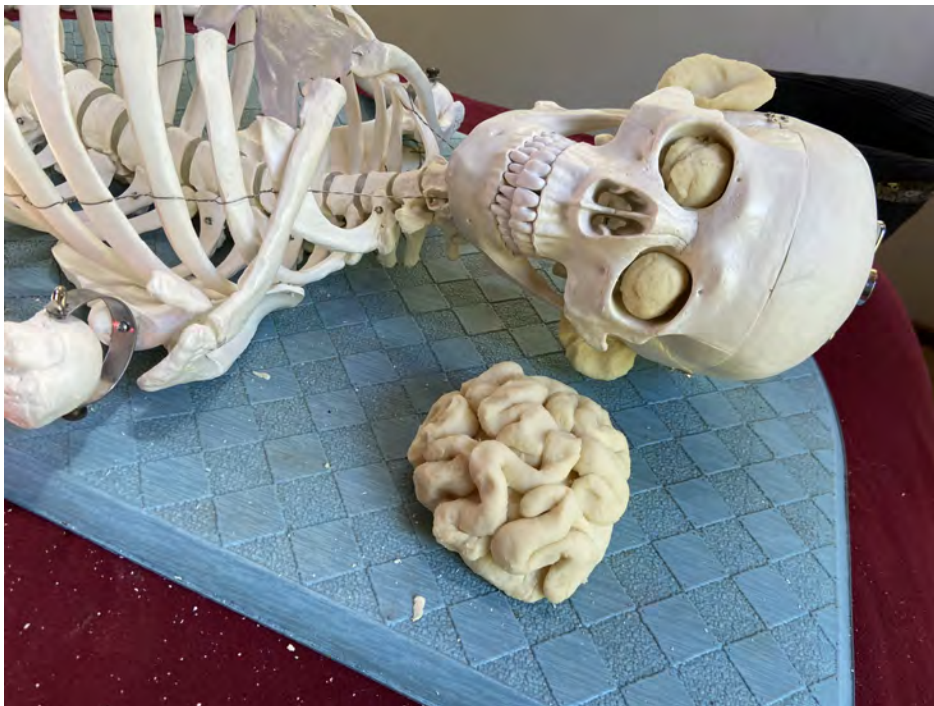




## Playdough Brain

Mix together 4 cups of flour, 4 cups of boiling water or hot tap water, 4 tablespoons of cream of tartar, 2 cup of salt, 4 tablespoons of oil, and a few drops of food coloring. When cool, knead until smooth and easy to shape.

NOTE: You may only need half of the above recipe depending on how many children you have.



Make a large playdough ball about 6 inches in diameter. Cut it in half. Have kids make thin playdough “snakes” to make the grooves of the brain. Place snakes on one half of the sphere, then on the other to represent 2 sides of the brain.



