

# FocusedKids<sup>™</sup> Brain Lesson

Before the Brain Lesson

#### Getting the brain ready to learn

Invite children to sit on the floor in a circle with the class. Tell them that we are going to talk about the brain or learn a new exercise for the brain today. If they are still learning about the parts of the brain explain that we are going to learn about our brain today. Use your own words to engage them. Do you know where your brain is? Did you bring it with you today? What is the skull? Review brain parts and job. Stress that Wise Owl really needs to be calm and focused for this lesson. We can help by using our breath and other senses.

Check-in:

1. How are you feeling today? (Thumbs up, etc) Use Guard Dog feelings chart. Help kids get "present" by taking some "time in" to get settled.

2. Take 3 deep breaths, sitting up straight and hands on tummy.

Teach and recite this refrain: When we listen (point to ear), to the chime, we are calm (brush hands over body), and focused (hand on forehead PFC)
Explain that you will count to 3 and hit the chime. They are to listen carefully to the tone until they cannot hear the tone anymore. When they can

no longer hear it, they can raise their hands, remaining quiet.

5. Before hitting the chime offer the opportunity to close their eyes or to keep them open focusing on a spot on the floor in front of them.

6. How are you feeling now? Ready to learn something new?

- 7. Mindful Movement piece (if needed)
- 8. Brain Button Reminder (It's normal for the brain to wander, and or get silly. When I see that happening, I will give you signal to help you remind your brain to calm down and pay attention. (Lesson page: 5)





Materials: A chime Time: 1 minute

#### Why it works

Listening to the chime while taking deep breaths slows everything down! Using the chime regularly trains the child's brain that when it hear's the tone it is time to breath and pay attention.

#### Goal

Children will practice listening to the chime several times a day, and master the ability to sit quietly for up to three minutes.

#### What to say

Tell the kids we are going to practice breathing while listening to the chime. This will calm our brain and help it get ready to learn.

- 1. Sit in mountain pose, straight and tall.
- 2. Close your eyes if you like.
- 3. Take a deep breath.
- 4. Listen for the sound of the tone.

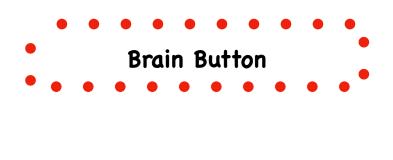
5. Raise your hand when you can't hear it anymore.



#### Summary:

"Peeking" may be part of getting comfortable with this exercise. We need to see what others are doing, and especially when we can't hear the tone anymore. Just bring kids back to their breathing and listening. Each person breathes and hears differently.

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Time: 1 Minute

Materials: Just yourself!

#### Why it works

This exercise was offered by a local preschool teacher as a very quick reset when kids are spinning out of control. She quietly says "brain button!" and the kids stop what they are doing, place their index finger on each temple, massage the area, and take a deep breath. It disrupts the frenzy by engaging the breath, the body, and the senses. Kids immediately pull themselves under control. Brilliant!

#### What to say

Explain that we are going to set up a signal for when it looks like our brain is getting too full or too active.

Have the kids place their fingers on each temple and rub a little bit. Explain that this is our brain button, and when they need to calm their brain they can just touch and rub this spot.

Let them know that you will help them from time to time to practice the 'brain button' activity. That you will do this when you see that it might be helpful to them.

Practice doing the activity together with the kids now.

#### Goal

Children will learn a quick and easy strategy for helping them regulate their behavior and thoughts.

#### Summary

Not all children will have the ability to respond positively to this activity on first try. With gentle reminders and practice most children can do this, and like it.

Reset your brain, with the brain button...



Color me focused

## Lesson 1 - The Brain

Teaching Kids About the Brain



Founder of Brainology, and author of Mindset, Carol Dweck, has conducted research that finds that children's attitudes and behaviors regarding achievement and failure are already in place by

preschool. Parents' and educators' messages about the malleability of the brain and the importance of effort must begin even earlier: talk of "head, shoulders, knees and toes" and "this little piggy went to market" should also make room for mentions of growing brains.

• **Introduction:** We believe that kids should know the very basic functions of the brain, and then understand them concretely. They learn about three parts the brain: the prefrontal cortex, the hippocampus, and the amygdala. They learn how these parts work individually and together, experiencing how their brain influences their emotions and behaviors. Finally, they learn exercises that help manage those emotions and behaviors. This skill is foundational for healthy prosocial behavior, successful academic habits, and general life competency.

• Goals of this lesson:

- 1. Children will learn three parts of the brain and their function.
- 2. Children will understand that their brain allows them to think, feel, and make decisions about how they behave.
- 3. Children will know that they are in charge of their brain using breathing and various tools to help them.
- 4. Children will, with awareness of how the brain works, and practice of the exercises, experience increased self-management, compassion, and patience.
- 5. Children will practice calming and focusing skills using them daily with their teacher. Their brains are training for self-regulation of the emotions, bodies, and thoughts.

Why it Works:

Children love this lesson. The puppets engage them, the big brain words excite them, and the concept that they can be in charge of their brain empowers them. It also gives adult and children a common language for dealing with emotional upset.

#### The Brain Lesson

- Materials:
- Brain Chart
- Hand Model Chart
- Neuron picture and facts
- Puppets (or stuffed animals)
- Calm Down Basket with Tools:

(Glitter jar, pinwheel, Hoberman Sphere, squish ball, stuffed animal, coloring materials • Chime)

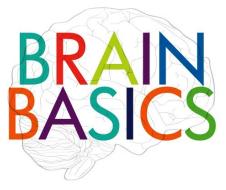
Why teach kids about their brain?



Since the brain is such a complex part of our bodies, it could be a difficult subject to teach to young children. Many parents will teach their toddlers or preschoolers about other parts of their bodies, but they don't often talk about the brain. Maybe, they think it's boring! But the brain is far from boring. The brain is a fascinating subject, and teaching not only about the brain but also practicing brain processing through activities and experiences both teaches your kids something new, and also hard wires their brains for later learning.

What do they need to know about their brain?

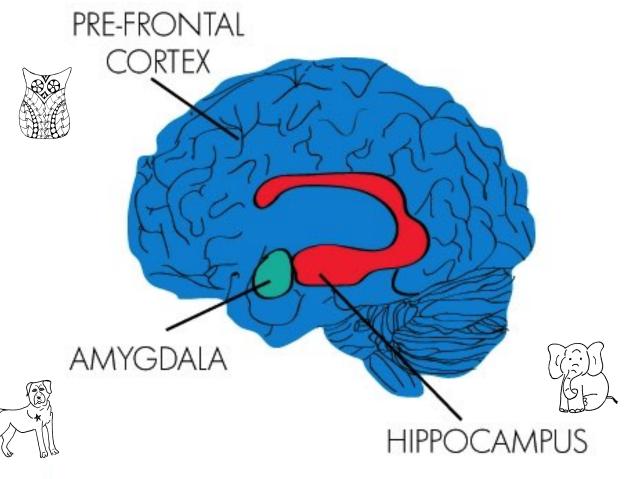
The brain guides everything that we do: our body's movements, our decision making, and our emotions. We teach kids about the parts of their brain that are key in early development. We believe that kids should know the very basic functions of the brain, and then understand them concretely. As they grow up, they can add more knowledge.



# **Key Players in the Brain**

#### **Prefrontal Cortex (PFC)**

(Wise Leader) Thinking, planning, problem solving, learning new things. Helps you wait before acting. Helps you understand your feelings. Executive functions.



#### Amygdala

(Guard Dog) Reacts to threat (fight, flight, freeze). Helps keep us safe. It's also in charge of curiosity, so can get us into trouble, too!

#### Hippocampus

(Memory) Processes and stores memories. Learning, experiences, and emotional responses are stored here.



### Teaching the brain parts - What to say:

**Describe** the brain as pinkish-grayish, squiggly-jiggly blob that sits in your head and doesn't move. But it's actually in charge of your entire body — like the body's boss, engine or coach. The brain controls everything you do, including automatic functions like breathing and digesting food, movements like running and scratching your nose, emotions like being happy or grumpy and processing sensory information like hearing and tasting. We are going to learn about 3 important parts of the brain.



**Guard Dog** is loud, active, and explains that its job is to keep you safe, and also it is in charge of being curious. It is full grown when you are born, and is often in charge until you are 4 or 5 years old.

**Dialog:** "HELLO! My name is Guard Dog. My brain name is a funny word, amygdala. Repeat after me and clap with each syllable.(3 times)." I have a huge job...I have to keep you safe. Do you feel safe right now? Tell me what makes you feel safe now.

When you are scared, or sad, or angry, or hungry, or tired, I'm the one who lets everyone else know that you need help. I do this by (bark). You know the times when you cry or just get upset? (have them name some of those times) That is when I bark. So someone will help you feel better.

I am also in charge of "curiosity." Do you know what that is? It's when you are doing one thing, and then something else happens, and you want to know what it is. So you stop what you are doing, and go to the new thing." (Demonstrate with the puppet by sniffing, and moving and sniffing something else.) Curiosity is a great thing because you get to learn new stuff.

To remember my name try this chant:

#### A-myg-da-la, I keep you safe! A-myg-da-la, I keep you safe! A-myg-da-la, I keep you safe!

When I think you are in danger or need something really important, or when I am curious, I sort of take over the brain. It might feel like you are flipping your lid! And when this happens, the other parts of your brain don't work as well, making it hard to learn or pay attention. So you have to help me calm down. That's why we take deep breaths! **Wise Owl** is quiet, focused, and moves it's head around to take in everything. It talks quietly. Its job is to pay attention, learn, solve problems, figure out feelings. It grows rapidly when you are 0-5 years old, and is grown up when you are around 25.

**Dialog:** Have the owl facing you, and explain that owls sleep during the day. You have to wake him up when you are teaching the brain to kids, and it sometimes takes awhile. Ask owl to please wake up and help you. Have him shake his head "no." Say "but I need your help, and these children are very cute." Shakes his head "no." Then coax him to look at the group, slowly. He turns his head a little each way but quickly looks back. Have the kids say "please Wise Owl, help us learn."



Slowly have him turn around. He says, "Good morning boys and girls. My name is Wise Owl, and my brain name is a huge word. Are you ready? Prefrontal cortex. Repeat after me (clapping with the syllables. 5 times) 'prefrontal cortex.' My nickname is PFC. Repeat. My brain job is to learn, solve problems, and help you understand what you are feeling. It's a big job since you will be learning for the rest of your life. I get bigger as you get older, and am grown up when you are 25 years old."

To remember my name try this chant:

#### P-F-C, follow me! P-F-C, follow me! I'll make you smart!

Have Wise Owl get Ms. Elefante and introduce her. "This is my friend Ms. Elefante. Her job is to remember everything, which helps me with my job. "I learn and solve problems, she remembers what we did before and stores what we are learning now."

**Ms. Elefante** is active, and I make her silly. She has trouble straightening out her trunk which is where she takes in all the memories. The kids help straighten it, and Miss Elefante thanks them for their help. Now she can do her job.

**Dialog:** "My name is Miss Elefante. My brain name is hippocampus. (Repeat 5 times together) "My job is remembering everything that happens to you, even before you are born. Like I can remember the sound of your mommy's voice before you were born! When you are born, I am ready to do my job and continue



to remember everything from that point on. I am good friends with Wise Owl and Guard Dog, and when we work together, we do an excellent job."

To remember my name try this chant:

## Brain Song: (to the tune of Dingo)

I have a brain in my head, and it is for thinking.

B-R-A-I-N

B-R-A-I-N

B-R-A-I-N

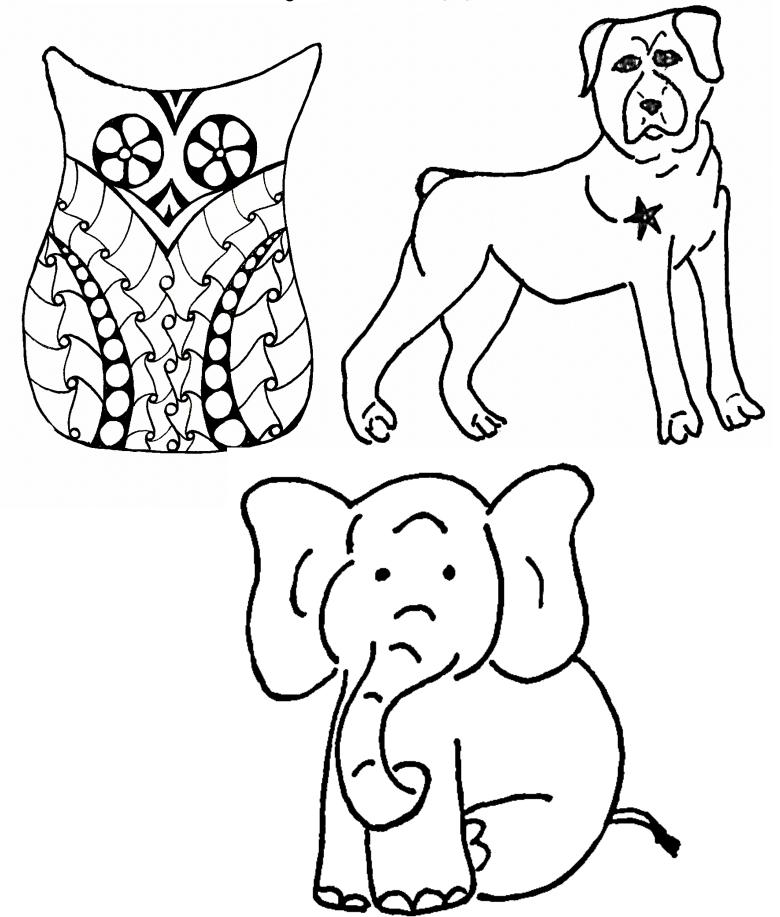
My brain is for thinking.

After the song, color the brain!



Color the Brain in your head!

Make the puppets: Color each template below together with your class. Cut them out and glue to them to popsicle sticks.

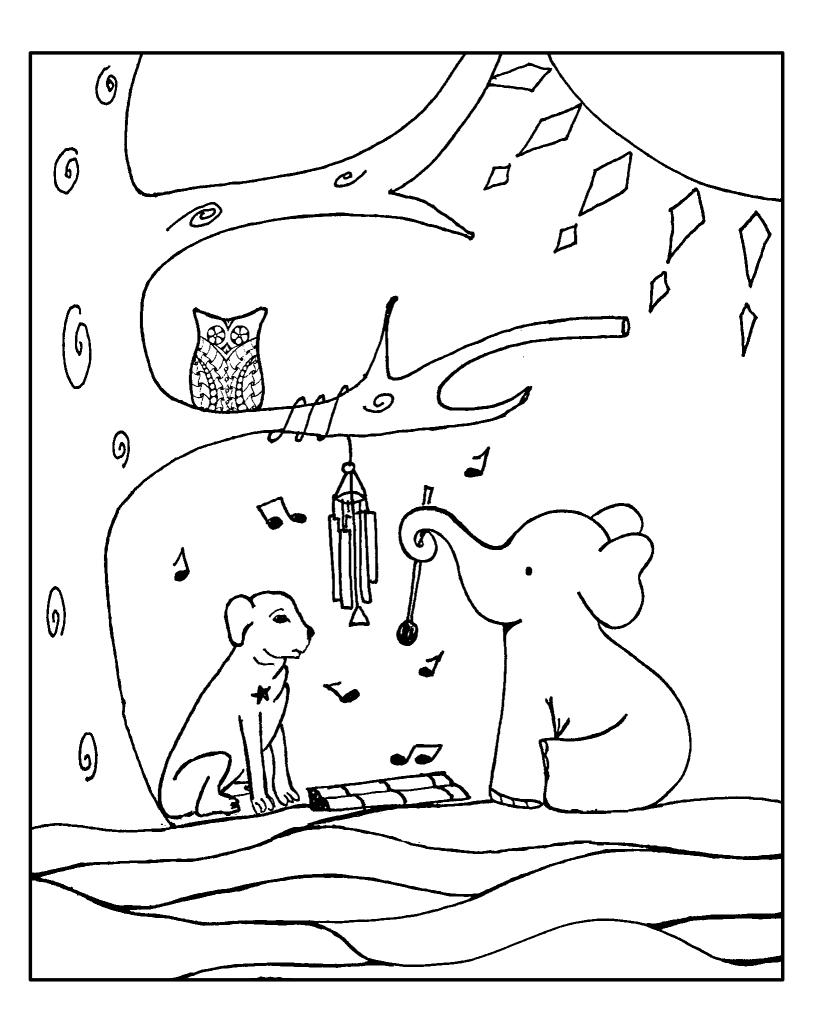


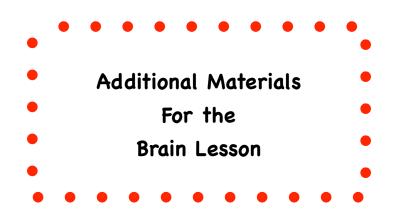
## All the Parts Work Together:

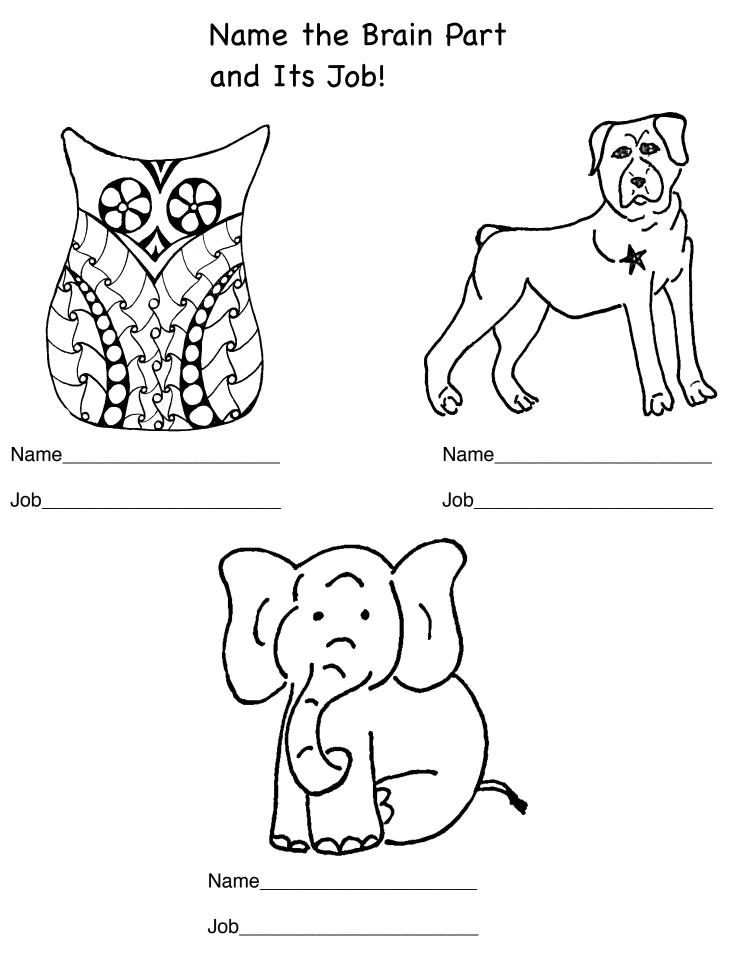
We then have a short puppet show in which the guard dog detects a threat (like being mad, sad, scared, tired, hungry, teased, you pick the feeling) and hijacks the other two puppets – jumps on their heads and won't let them do their job. They can't get back to work until Guard Dog calms down. "What does Guard Dog need to settle down?" Kids might say breathe, or use the chime. If they make these suggestions, congratulate them on their hippocampus working well. They remembered what to do! If they don't say anything, remark "Hmmmm. Your hippocampus must not have stored this information in the past. Let's give it a hint." Breathe.

Coach guard dog (while he is still on top of owl and elephant) to take a breath. "Guard Dog, you need to take a deep, slow breath now so that you can calm down. Have him do so, with difficulty. Check in and ask if he is feeling better. He shakes his head no. Once again. Repeat three times. With the third breath have him slowly slide down off of the other puppets. Have the puppets be close together, maybe high-5 the guard dog, and exclaim they are ready to cooperate again.

To reinforce this lesson, have students color the picture below.







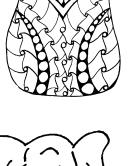
This blue part is called the \_\_\_\_\_.At birth, this part of the brain is 80% developed and won't be fully developed until the early 20's. It is in charge of \_\_\_\_\_, solving problems, planning, making sense of emotions and when it gets larger helps to think before acting. We call it the "Wise Owl" because it's smart and knows how to do things.

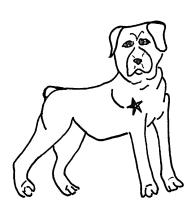
Three Key Parts

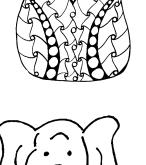
**Brain Quiz** 

This red part is called the \_\_\_\_\_. It is in charge of \_\_\_\_\_ and stores all experiences and learning. It's even working while in-utero; before birth! It records the sound of mom's voice, smell, and even her mood before the baby is born. We call it "Ms. Elefante" because the elephant has a great memory.

The little green shape that looks like an almond is called the . It is fully developed when the baby is born. Some call it the "watchdog" of the brain. It is in charge of \_\_\_\_\_ and that's a very big job! You know it's working when the baby cries. It's saying "I need something and I don't know how to get it! It's my way of letting you know I need you."

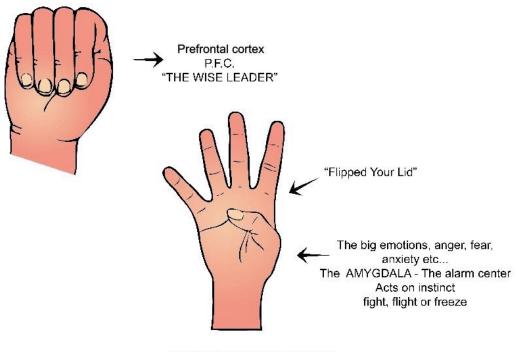








## "Flipping One's Lid"

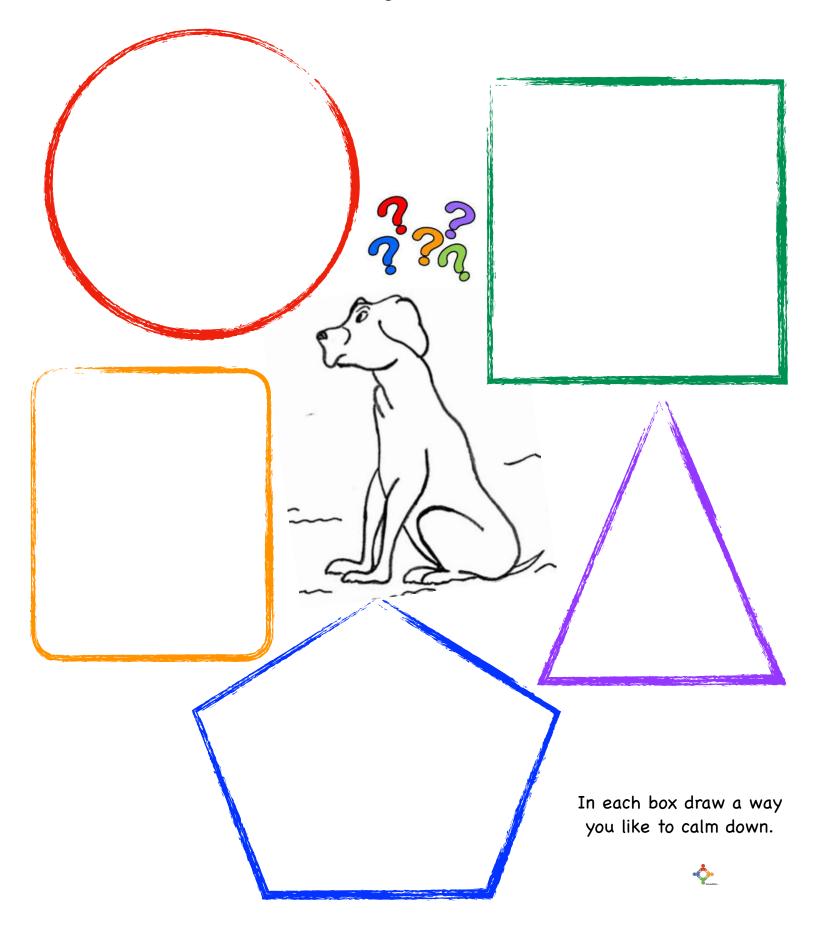


Credit: Daniel Siegel, V.D. is the creator of this metaphor and expression "Flipped Lid". Copyright  $\otimes\,2014$  www.sharonselby.com

Above is a hand model of the brain when it has "flipped." Emotional regulation is not something we are born with. Toddlers have no emotional regulation skills. Their emotions can swing like a pendulum. But they can learn these skills, and helping kids learn to self-regulate is one of the most important developmental tasks. Using this hand model is a fun, always available, and non-verbal signal you can use to point out what parts of the brain you notice are working in the moment.



## Finding My Calm



## Helpful Resources

Ages 3-5



## Ages 6-8



