



Week 21

Learn About Your Amygdala with Brainy

MINDFULNESS PRACTICE: **Take Five**

OBJECTIVES: **Learn about how the amygdala operates.**
Practice kindness.

PREPARE: **A bell or chime**
Copies of the Amygdala Worksheet (in the Resource Section)
Video of Dr. Daniel Siegel’s Model of the Brain. Watch this before class: for the teacher, not the students http://www.drdansiegel.com/resources/everyday_mindsight_tools/
Review diagram of the brain (see Resource Section)
Your Kindness Pals list
Optional: Brainy the Puppet
Optional: Talking Object

This lesson is written to include Peace of Mind’s puppet called Brainy. We have designed Brainy to complement the lessons and stories presented here. The children we work with love Brainy, and it really seems to help them learn. However, you can do this lesson without Brainy by using your hand to make the model of the brain as in the video featuring Dr. Siegel. Wherever it says “Brainy the Puppet” below, please feel free to substitute your hand if you prefer.



NOTE FROM LINDA: *This is really a personal choice depending on your comfort level and your personality. If you enjoy doing funny voices you can have Brainy talk - you can have “Amy” have a separate voice. Feel free to make this your own. I usually don’t have Brainy talk like a traditional puppet but you can make it the way it feels right to you.*

Mindfulness Practice

Invite today's Mindfulness Helper (MH) to come to the front of the class to sit next to you on a chair (or next to you on the floor).

Say: *Let's all be happy for _____.* (sign language applause)

Prompt the MH to say: "Let's get into our mindful bodies. Let's close our eyes or look down. Let's take **five** deep breaths." Remind the children how to do Take Five breathing.

Now take a deep breath, and listen for the sound of the bell. Try to listen to the whole sound of the bell. Open your eyes or look up when you cannot hear it anymore.

Ask the MH to ring the bell and return to their seat.

Brain Science

Introduce Brainy.

Use Dr. Daniel Siegel's hand model of the brain and Brainy the puppet (or your hand) to explain how the amygdala and the prefrontal cortex come into play when we are angry. (See above.)

Remember, DO NOT show Dan Siegel's video to the class.

You might say:

Today I'd like to introduce you to my friend Brainy. Brainy is going to help us learn about our brains. Do you remember the three parts of your brain that we learned about last time when we read the book Rosie's Brain?

That's right, we learned about the Amygdala, the Hippocampus, and the Prefrontal Cortex! Today with Brainy's help we are going to learn more about our Amygdala.

Hold up Brainy in the closed position (fingers folded down over your thumb) in the shape of the hand model.

Can you do this with your hand? Tuck your thumb inside and then fold your fingers over your thumb. Now your hand looks a little bit like your brain.

Hold Brainy up next to your head.

The first part of the brain we're going to learn about is called the Amygdala. (Ah-mig-duh-la) The amygdala is the little part of your brain inside here. (point to your thumb) What is the Amygdala called in Rosie's Brain? That's right - Amy!

Lift your fingers to show the tucked-in thumb.

The amygdala has a really important job. It's job is to keep you safe. It is always watching out for danger and getting ready to protect you. It's like your brain's little security guard. Sometimes the amygdala is really good at its job and sometimes it needs a little help.

Has this ever happened to you? You were about to cross the street when you heard a car coming. What do you do? (take some answers)

Do you think it would be a good idea to stand there and think for a while about what you should do? No! You need to act fast. That is something that the amygdala is great at. The amygdala doesn't stop and think - the amygdala just reacts. (open your Brainy so that the amygdala is out and your fingers are stretched back) So when your amygdala hears that car coming it immediately tells you to jump back up on the sidewalk. Phew! Great job, Amygdala!

Here's another example: What do you do if somebody yells "Duck!?" (take some answers)

That's right - you would cover your head and maybe get down low. Why do you think you do that? That's right - Amygdala! If the amygdala thinks something is flying at your head it isn't going to stop and think about what to do. It is going to protect you. Thanks Amygdala!

But sometimes the amygdala gets a little confused. Sometimes the amygdala thinks you are in danger when you are really just disappointed or frustrated or mad.

In the story Rosie's Brain, why was Rosie angry? That's right - she didn't want to go to her piano lesson because she wanted to play frisbee with her friend Henry.

Was Rosie in danger? No! But Amy thought she was because Rosie was angry.

So how did Amy react? That's right - she yelled at her mom, threw her bagel on the floor, stomped upstairs and slammed the door.

Ask: Has this ever happened to you?

Maybe you were hoping to have ice cream after dinner but then your grown up tells you that you can't have any. How would you feel? Do you think you might yell, "No!! That's not fair! I WANT ICE CREAM!"

How about this? You are playing with Legos with your friend and they take some of the pieces you are using. How would you feel? Do you think you might say, "Hey give those back!! THOSE ARE MINE!!!" Do you think you might want to grab the Legos back?

Can you think of a time when your amygdala thought you were in danger but maybe you were just mad, or frustrated or disappointed because you didn't get what you wanted?

Take some answers.

We each might have different reactions but those are examples of your amygdala thinking you are in danger when you aren't. When your amygdala thinks you're in danger it doesn't stop to think about what to do. It just reacts. And sometimes that reaction doesn't really help. Sometimes it makes things a lot worse. Do you think you're going to get ice cream after yelling about it? Probably not. Do you think if you grab Legos from your friend that they are going to want to play with you? Maybe not.

So the more that we understand how the amygdala works the easier it is for us to help.

Fight, Flight or Freeze

The amygdala only has three ways of reacting when it thinks you are in danger. They all start with the letter "F".

Fight

When you get mad at your little sister for ripping up your new drawing and you feel like hitting her, that is one of the amygdala's reactions. Can anybody guess what that word that starts with "F" is? (Take some guesses)

It's "Fight". When the amygdala thinks you are in danger it might think that it would be helpful to fight. If you were really in danger that might be a good idea but most of the time it isn't.

Flight

When I see a mouse my amygdala usually wants me to run away. That is another reaction that the amygdala has - we call it "Flight". It doesn't mean that you can fly when you get mad! But it's a word that means to run away. Sometimes that can be helpful but sometimes it's not a good idea.

The third reaction you might have seen when you have surprised a squirrel. Usually if a squirrel sees you it is scared because you are a big human. So a squirrel isn't going to put up his little dukes and fight you. What do you think the squirrel will do? Run? That's right - flight!

Freeze

The other thing a squirrel might do is freeze. It might freeze in one place in the hopes that you won't see it. That's the squirrel's amygdala at work!

Rosie's Brain

What choice did Amy make in Rosie's Brain? That's right - Fight! She wanted Rosie to yell and throw stuff and even smash the piano into a million pieces!

So the amygdala's three choices are Fight, Flight, and Freeze. That's it. That's all the amygdala can do. Sometimes those are really helpful, good ideas and sometimes they make things worse.

Your amygdala feels scared sometimes too. Your amygdala might tell you not to jump off the diving board or not to raise your hand in class to answer a hard question.

*Your amygdala wants to take care of you, to protect you. But, if we **only** listened to our amygdala, we wouldn't be very happy. We'd be in fights with people all of the time and we wouldn't do anything that we are scared to do, even really fun things like learning how to ride a bike or learning how to swim.*

So sometimes we have to take care of the amygdala. And luckily we have already learned how to do that? Can anybody think of something we have learned so far in Peace class that would help us to take care of the amygdala?

Take some answers.

That's right - mindful breathing! Taking slow deep breaths - like Take Five Breathing or Wave Breaths or Tummy Breaths (or whatever else you have been practicing) can be a great way to send a message to the amygdala that we are not in danger and don't need their help right now.

So the next time you feel yourself getting angry you can say, "That's okay, Amygdala! I'm not in danger" and you can take some deep breaths. See what happens!

Discuss

Ask: *Can you think of a time when your amygdala tried to help you and it helped? (take some answers)*

Can you think of a time when your amygdala tried to help you and it made things worse? (take some answers)

Activity: Drawing

Pass out the Amygdala worksheet.

Invite the students to think of a time when their amygdala tried to help them.

Say: *Let's draw about it!*

Next time we'll learn more about some other parts of our brains.

Kindness Pals

Do the Kindness Pal activity as before.

If there is not enough time for sharing, you can skip that, but be sure to give the students new Kindness Pals.

Closing Words: *Let's have a nice quiet moment with the bell. You can close your eyes or leave them open, but let's sit quietly and listen to the bell. If you want to, you can think about your new Kindness Pal and imagine yourself doing something kind for him or her.*

Ring the bell or chime. *Thanks for a great class, everyone.*