

# The Brain Game

## PURPOSE

The Brain Game is a way to reflect on the way your brain works in an integrated way to allow you to focus, think clearly and flexibly, and recall important information – and also how the brain’s stress response makes that difficult!

## DIRECTIONS:

Follow the instructions below to facilitate The Brain Game with educators or students.

## Launch

Using the chart below, assign a role to each group member for the game. It is okay if there are members who do not have assigned roles; they can still be active participants in the observation and discussion. You may want to show The Brain’s Learning Centers visual for reference.

Role:	Description:	Participant:
Prefrontal Cortex	The brain’s “air traffic control,” helping it to focus, think clearly and flexibly, plan, decide, and resist impulses and distractions.	
Hippocampus	The brain’s memory center, storing and recalling information and past experiences.	
Amygdala	The brain’s alarm system, alerting the rest of the brain and body to signs of emotional significance, stress and danger.	
Teacher	This participant provides the brain with the information it needs to complete the task.	

## Engage

- Introduce each participant to the group, stating their role and description (as above).
- Give each participant the slip of paper with their set of directions (see next page for directions). Ask participants to silently read their directions to themselves, without telling the rest of the group.
- Explain, “For this game, each part of the brain will need to work together to accomplish a task! We are going to do two rounds: the first when the brain is calm and focused, and the second when it is stressed.”
- Cue participants to begin round 1, and then round 2.

## Reflect

Ask:

- In the first round, how did the parts of the brain work together to accomplish the task?
- In the second round, what was different? How did the amygdala’s response change the way the brain was able to communicate?

## Discuss

Explain, “This is what happens when the brain experiences significant stress. Hyperarousal of the amygdala interferes with effective communication between all of the structures, which normally facilitates effective thinking and learning.”

Ask:

- What would it be like for a student sitting in class to be experiencing significant stress?
- To a teacher, what might it look like if a student is experiencing significant stress?

## The Brain Game (contd.)

Cut out each set of directions and give them to participants:



Role:	Round 1: Calm and Engaged	Round 2: Stressed
Teacher	<p>Ask the prefrontal cortex the following questions, in order. Do not tell them if they are right or wrong.</p> <ol style="list-style-type: none"> <li>1. What is pear plus lemon?</li> <li>2. Now, take that and multiply it by blue.</li> <li>3. Now, take that and subtract pink.</li> <li>4. Now, take that and divide it by red.</li> <li>5. Now, name that many things in the violet category.</li> <li>6. Now, put those things in blueberry order.</li> </ol>	<p>Ask the prefrontal cortex the following questions, in order. Do not tell them if they are right or wrong.</p> <ol style="list-style-type: none"> <li>1. What is purple plus banana?</li> <li>2. Now, take that and multiply it by green.</li> <li>3. Now, take that and subtract apple.</li> <li>4. Now, take that and add yellow.</li> <li>5. Now, name that many things in the orange category.</li> <li>6. Now, put those things in grapefruit order.</li> </ol>

Role:	Round 1: Calm and Engaged	Round 2: Stressed
Prefrontal Cortex	Listen to the teacher and answer their questions as best you can.	Listen to the teacher and answer their questions as best you can.

Role:	Round 1: Calm and Engaged	Round 2: Stressed
Hippocampus	<p>Tell the prefrontal cortex the information they need from the list below:</p> <ul style="list-style-type: none"> <li>• Blue = 2</li> <li>• Red = 3</li> <li>• Pear = 4</li> <li>• Blueberry = Alphabetical</li> <li>• Violet = Types of candy</li> <li>• Lemon = 3</li> <li>• Pink = 5</li> </ul>	<p>Tell the prefrontal cortex the information they need from the list below:</p> <ul style="list-style-type: none"> <li>• Purple = 2</li> <li>• Banana = 3</li> <li>• Orange = Underwater animals</li> <li>• Green = 3</li> <li>• Grapefruit = Size</li> <li>• Apple = 12</li> <li>• Yellow = 1</li> </ul>

Role:	Round 1: Calm and Engaged	Round 2: Stressed
Amygdala	Cheer the prefrontal cortex on, without being distracting! Say things like, "You're doing great, this is so exciting," or "Wow, nice work," to motivate them.	Be LOUD and DISTRACTING! Yell, "Danger!" "Alert!" and try to distract them by jumping around or waving your arms.

## The Brain Game (contd.)

### The Brain's Learning Centers

