

## Unit 4B: Stress and The Brain



### Vocabulary:

**Stress** - A state of mental tension and worry caused by your life, school, or work problems.

**Stress Response** - The human body's reaction to anything that throws it off balance including injury, infection, fear, exercise, or pain.

**Breath Brake** - A tool that we can use when we feel our body reacting to something that makes us feel scared, angry, sad, or anxious.

### Teacher's Notes:

## How To Begin and End Each Lesson

### Begin With a Breath Brake

Instruct students to stand at attention, repeat the hand motions and the mantra, **Power Peace Purpose**, and end with a bow. Ask students to take several breaths to clear their minds and prepare to watch the video.

#### Teacher Statement:



*The Breath Brake helps us clear our minds, relax and focus. Focused breathing stops the flow of stress chemicals from the brain. You can close your eyes if you want to. Follow along:*

- ★ *Breathe in through your nose, slowly and deeply. Think of each breath as a wave as it gently raises, holds, and then slowly lowers your body.*
- ★ *Hold it for three seconds.*
- ★ *Breathe out slowly and steadily from your mouth while you feel your body gently relax.*
- ★ *Breathe in and visualize that you are breathing in a powerful light.*
- ★ *Breathe out and imagine you are blowing out any darkness.*
- ★ *Breathe in, hold for 3 seconds, then breathe out. Repeat as needed.*

*Remember when you breathe, you are helping others who need your light. **Power Peace Purpose.***

*There are thousands of children around the world who spend a lot of time in the hospital. Sometimes, they feel very lonely. When you join the Heroes Circle, it makes them feel better. When you do your power breathing you are also teaching your family and friends around you. You are an amazing teacher and a good friend!*

### End with Power Peace Purpose:

Recite and review the Power Peace Purpose mantra with students at the end of each day's lesson. Then, the students bow.



*The Breath Brake helps you restore your power, brings you to a place of peace, and enables you to understand your purpose.*

# Unit 4B: Stress and The Brain

## Day 1: WATCH



**Focus: Social Awareness**

Students will watch a video about stress and the brain.

**Learning Objectives:** In this lesson, students will:

- Observe how the brain works when it is under stress.
- Describe how the brain controls the human body, but you are in control of your brain.
- Practice the Breath Brake and repeat the **Power Peace Purpose** mantra.

**Time Requirement:**

15 minutes



**Materials Needed:**

Video - [HeroesCircle.org/SupportMaterials4](https://www.HeroesCircle.org/SupportMaterials4)

### Lesson Process:

#### 1 Begin with a Breath Brake:

Begin with the mantra **Power Peace Purpose**. Then, students bow. Lead students through a Breath Brake.

#### 2 Introduce key concepts:



*Today we will watch a video about stress and the brain. When your brain is stressed, it can make you experience uncomfortable feelings and thoughts. It is easy for those feelings to control your life and make you and everyone around you miserable. Everyone experiences stress naturally, and we can learn to manage it effectively. This video will help us better understand how the brain responds to stressful experiences.*

#### 3 Show the video:

Show the video – [HeroesCircle.org/SupportMaterials4](https://www.HeroesCircle.org/SupportMaterials4)

#### 4 Talk about key concepts:



*As you saw in the video, the brain responds to stress by sending hormones (messages) throughout your body. Your brain is powerful. Your brain's primary job is to protect you, but sometimes it is too protective. Your brain might misinterpret or overreact to what's happening to protect you - even though it may be unnecessary. This makes it look like your brain is trying to lie to you or play tricks on you – it wants you to think something is dangerous, sad, or upsetting when it's not. When you experience stress, your brain brings up all the stored emotional memories and replays them repeatedly. Your brain tries to control your thinking, so you believe something is worse than it is, even when it's not. The important thing to remember is that you control your brain. You can use a Breath Brake to stop the brain and regain control. When your body and brain feel calm, you can think clearly. You are in control of your stress response.*

**Use the following talking points to encourage discussion as a class, in small groups, or student pairs:**

- Which difficult feelings could you experience besides anger, fear, and pain? Responses may include:
  - Sadness, frustration, shame, guilt, loneliness, embarrassment.
- What happens to your brain when you are in a stressful situation? Responses may include:
  - The brain releases stress hormones (messages) and sends them throughout the body.
  - The brain brings up all the stored memories, feelings, and thoughts from past experiences.
- Your feelings and stress can take over and make you miserable. How can you regain control? Responses may include:
  - Take a Breath Brake to relax your body and tell your brain that you are in control.



#### 5 End with Power Peace Purpose mantra:

**Power Peace Purpose**. Then, students bow.

## Day 2: THINK



### Focus: Responsible Decision Making

Students will be encouraged to think and talk about stress and the brain.

**Learning Objectives:** In this lesson, students will:

- Describe how the brain stores and then replays memories during times of stress.
- Describe how the brain tries to control our stress response with feelings and thoughts.
- Practice the Breath Brake and recite the **Power Peace Purpose** mantra.

**Time Requirement:**

15 minutes



**Materials Needed:** N/A

### Lesson Process:

#### 1 Begin with a Breath Brake:

Begin with the mantra **Power Peace Purpose**. Students bow. Lead students through a Breath Brake.

#### 2 Review key concepts:



*Think about the video that we watched about stress and the brain. We learned that when we face stress, feelings and thoughts can take over and make us miserable. The brain replays our memories of prior stress experiences, which can worsen the current situation. The most important thing we learned is that during times of stress, the brain tries to control us – but we can regain control with a Breath Brake.*

Ask students to share what they learned from the video.

#### 3 Think about key concepts:



*Think about Sensei Richard's example from the video. One of your friends makes a little joke at your expense. You might feel disrespected, embarrassed, or angry. What they said is minor or not so bad - maybe a level 2, but to you, it feels serious and hurtful, more like a level 8 or 9. Today we will talk more about how your friend's joke can trigger all the negative memories in your brain. Your brain replays those memories while you face the current stressful situation. All that stress can lead to an overreaction, and some might call it 'blowing things out of proportion.' Have you ever experienced a situation where something should not have been a big deal, but your brain tried to tell you it was?*

Ask a few students to share examples of 'blowing things out of proportion.'

#### 4 Talk about key concepts:

**Use the following talking points to encourage discussion as a class, in small groups, or in partner pairs:**

- What should you consider as you decide how to handle a stressful situation? Responses may include:
  - Am I letting my brain control my decision, or am I in control?
  - Is my decision smart, safe, healthy, or appropriate?
  - Am I reacting out of anger (or other feelings), or is my decision thoughtful?
- How does your brain try to lie or trick you to react to stress? Responses may include:
  - Stressful memories flood your brain, and you get so angry that you just react.
  - Negative memories can overwhelm your brain, so you can't think clearly or calmly.
  - Your brain tries to control you with thoughts and feelings.
- How does your Breath Brake affect others, especially others in the Heroes Circle?
  - You are in control when you manage your stress with a Breath Brake.
  - You can regain power, clarity, and focus with a Breath Brake.
  - You become an amazing teacher, and you can show others a tool that they can use to find power and control.



#### 5 End with Power Peace Purpose:

**Power Peace Purpose**. Then, students bow.

# Unit 4B: Stress and The Brain

## Day 3: DISCUSS

### Focus: Relationship Skills

Students will engage in discussions about stress and the brain.

**Learning Objectives:** In this lesson, students will:

- Identify an example of a stressful experience and how your brain and body responded.
- Analyze how the brain tries to control you with thoughts, feelings, and memories.
- Practice the Breath Brake and repeat the **Power Peace Purpose** mantra.

**Time Requirement:**

15 minutes



**Materials Needed:** N/A

### Lesson Process:

#### 1 Begin with a Breath Brake:

Begin with the mantra **Power Peace Purpose**. Students bow. Lead students through a Breath Brake.

#### 2 Review key concepts:



*Yesterday, we watched a video about stress and the brain. We learned how the brain stores emotional memories and then brings them up and replays them in times of stress. That can make a small situation seem worse than it is. We can observe that stress in ourselves and others. For example, maybe you have noticed when your parent has a quick temper and is yelling or overreacting to something that you think is no big deal. This is a stress response to the pain, worry, and fear he or she may be experiencing.*

The teacher will give a personal example of a stress response. Then ask students to describe an example of a stressful experience and how they responded?

#### 3 Discuss key concepts:



*Today we will talk more about how the brain may try to lie to you so you think something is worse than it is. Remember that the Breath Brake relaxes the body and sends a message to the brain that you are in control. You put yourself in a place of power by using your breath to stop the stress signals in your brain and body. Your breath tells your brain that you are in control. That's powerful! Think about how that power can affect how we interact with others.*

**Use the following talking points to encourage discussion as a class, in small groups, or in pairs:**

- **Sensei Peter explained that if feelings take control, a person might do something he or she regrets. Give an example of when a person might overreact and how that could damage a relationship.**

**Responses may include:**

- A friend overreacts to your teasing and spreads rumors about you.
- A friend overreacts to a lost invitation and ghosts you.
- A friend overreacts to a text message and starts an argument with you.

- **When something triggers your feelings and stress response, how could the Breath Brake help you?**

**Responses may include:**

- You can use the Breath Brake to stop the flow of stress signals to calm your body and mind so you can think clearly.
- Your breath can help you take control, so you don't let your feelings take over.

- **Describe how the Breath Brake could prevent conflicts with others. Responses may include:**

- The Breath Brake gives you the power to respond mindfully.
- It can help you think more clearly and talk it out instead of fighting.
- It could help you realize that something's not such a big deal, after all, so you can let it go.

#### 4 End with Power Peace Purpose:

**Power Peace Purpose**. Then, students bow.

## Day 4: APPLY

### Focus: Self-Management

Students will work independently to apply the concepts from the video to a self-reflective activity about stress and the brain.

**Learning Objectives:** In this lesson, students will:

- Describe a personal experience with stress, including feelings, thoughts, and triggers.
- Identify why the situation was stressful and how they could use the breathing strategy.
- Practice the Breath Brake and recite the **Power Peace Purpose** mantra.

### Time Requirement:

15 minutes



### Materials Needed:

ACTIVITY SHEET - 4B:  
*I AM IN CONTROL*

## Lesson Process:

### 1 Begin with a Breath Brake:

Begin with the mantra **Power Peace Purpose**. Students bow. Lead students through a Breath Brake.

### 2 Review key concepts:



*Yesterday we talked about some stressful situations, including how the brain may try to control us by lying or tricking us into thinking the situation is worse than it is. But the brain does not control you. Using the Breath Brake sends a message to the brain that you are in control.*

### 3 Personalize key concepts:



*Today you will apply what you learned. Close your eyes. Think about the last time you felt really stressed. Maybe you argued with a friend or worried about a test or an upcoming doctor's appointment. [Pause for students to identify a situation in their minds.]*

*Now think more deeply and be specific. Which feelings did you experience that caused your stress response? [Pause for students to identify the feelings in their minds.]*

*As a powerful martial artist, you know how the brain works and have a tool to regain control - the Breath Brake. If you focus on your breathing and what's happening inside your body, you can respond mindfully to what's happening around you.*

The teacher can share a personal stress example, feelings, and how the Breath Brake could help. Encourage a few students to share their stress examples.

**Use the following talking points to encourage discussion as a class, in small groups, or pairs:**



- Which of your personal strengths can help you identify feelings and triggers before your stress response gets out of control? Responses will vary.
- Who can support you in maintaining self-control when you feel stressed?
- How can the Breath Brake make you more powerful when you feel stressed? Responses will vary.

### 4 Apply key concepts:

Distribute the ACTIVITY SHEET - 4B: I AM IN CONTROL. Ask students to work independently to complete the activity sheet about their stress experiences.

### 5 End with Power Peace Purpose:

**Power Peace Purpose**. Then, students bow.

# Activity Sheet - 4B: I AM IN CONTROL

Name \_\_\_\_\_ Date \_\_\_\_\_

Think about a time when you felt scared, worried, or angry to answer the questions below.

Describe your stressful experience in a few sentences.

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Which feelings and thoughts caused your stress response?

I felt \_\_\_\_\_

I thought \_\_\_\_\_

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Where and how did you feel the stress response in your body?

I felt stress in my \_\_\_\_\_

It felt like \_\_\_\_\_

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How could the Breath Brake help when you feel a stress response?

The Breath Brake can \_\_\_\_\_

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What could you tell your brain when you feel stressed?



"Hey brain, \_\_\_\_\_

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## Day 5: SHARE



### Focus: Self-Awareness

Students will share their learning about stress and the brain.

**Learning Objectives:** In this lesson, students will:

- Describe their stress response, including feelings, thoughts, triggers, and body sensations.
- Identify how the Breath Brake can be used to take control and manage a response to stress.
- Practice the Breath Brake and repeat the **Power Peace Purpose** mantra.

### Time Requirement:

15 minutes



### Materials Needed:

ACTIVITY SHEET - 4B:  
*I AM IN CONTROL*

## Lesson Process:

### 1 Begin with a Breath Brake:

Begin with the mantra **Power Peace Purpose**. Students bow. Lead students through a Breath Brake.

### 2 Review key concepts:



*Yesterday we talked about stressful experiences. You recalled a recent stress experience and identified specific feelings and thoughts that caused your stress response. You identified where and how that felt in your body. Then we talked about how the Breath Brake stops your brain's attempts to trick you and allows you to take back control.*

### 3 Share the learning:

*Today we will share our learning experiences with one another to gain a better understanding of the brain and stress. We all experience stress in different ways, and we can all regain control and successfully manage our stress with a simple technique called the Breath Brake.*

Ask students to reflect on their completed activity sheet, ACTIVITY SHEET - 4B: I AM IN CONTROL. Ask a few students to share their responses and learning with the class.

**Use the following talking points to encourage discussion as a class, in small groups, or in student pairs:**



- What situations or experiences trigger your stress response? Responses will vary.
- Where and how do you feel stress in your body? Responses will vary.
- How can the Breath Brake give you power and control over your stress? Responses will vary.

### 4 Summarize key concepts:



*This week, we learned about stress and the brain. Specifically, we learned how experiences could trigger feelings, thoughts, and a stress response. The powerful brain controls much of what we do and stores memories of our experiences. When we face stress, the brain brings up these emotional memories and replays them repeatedly. This is how the brain tries to control you, but YOU control your brain. You learned how to recognize your personal stress response and send the brain the message that you are in control. As we move forward in our learning as martial artists, let's practice using this important technique and build on our acquired knowledge.*

### 5 End with Power Peace Purpose:

**Power Peace Purpose**. Then, students bow.