

*To control the breathing is to control the mind.  
With different patterns of breathing, you can fall in love,  
you can hate someone, you can feel the whole spectrum  
of feelings just by changing your breathing.*

—Marina Abramovic



## EMPOWERING EDUCATION

Mindfulness-Based Social & Emotional Learning

### The Power of Deep Breathing

**Level:** Middle School (6-8)

**Timeframe:** 30 minutes

**Concepts:**

- Attention
- Breath
- Coping Skills



### Big Ideas For This Lesson

Breathing is underrated. Life has relied on breath for at least 2.5 billion years. Breath predates most life-supporting functions. This biological heritage means that breath is deeply integrated across neurological systems. This makes breath a powerful tool.

Breath is so powerful, in fact, that recent scientific studies have demonstrated deep breathing techniques to positively affect the heart, the brain, digestion, the immune system and possibly even the expression of genes.<sup>1</sup> In one remarkable study, participants used deep breathing techniques to voluntarily activate their autonomic nervous system, resulting in changes in blood chemistry and hormone levels that enabled the participants to override the body's natural immune response after being injected with an endotoxin and, essentially, not get sick.<sup>2</sup> The same breathing techniques, in combination with mindfulness practices, have been used to withstand extreme cold and accomplish world-record breaking feats of athleticism – all using the simple power of deep breathing.<sup>3,9</sup>

This lesson builds on the foundational concepts introduced in the 3-5 lesson: [Breathing Basics](#) by introducing students to a variety of deep breathing exercises that can be used to manage stress, relax the mind and body, improve attention and focus, and improve overall physical and mental health.



## Essential Vocabulary

Autonomic Nervous System  
Breath Quality  
Breath Quantity  
Deep Breath  
Diaphragm Muscle  
Diaphragmatic Breath  
Shallow Breath

## Materials

Use the following video to demonstrate [How Breathing Works](#) <sup>4</sup>



## Preparation

Review and practice the breathing exercises described in the Guided Practice section.



## Teaching Script

### BUILDING BACKGROUND KNOWLEDGE & CONCEPT MODELING (I DO)

**Teaching Note:** Students should be familiar with the basics of breathing mechanics and the difference between a **diaphragmatic breath** and **shallow breath** before teaching this lesson. Review these concepts as needed using the [Breathing Basics 3-5 Lesson](#) as a reference.

Watch the [How Breathing Works](#) <sup>4</sup> video to review the basics of breathing and introduce the concept that breath can be used to influence our mood, reduce stress, improve concentration, and even strengthen our immune system.

Facilitate a brief discussion to further establish the relevance of deep breathing. Use the script below as a guide, solicit student input, or share any personal connections to deep breathing practices.

*From the moment you are born to the moment you die, you are always breathing. For the most part, breathing is something that happens without us even having to think about it. It will naturally speed up when we are physically or mentally stressed, and it will naturally slow down when we rest or sleep. Your breath is constantly changing throughout the day depending on your mood, thoughts, activities, environment, and many other factors. What are some examples of situations where our breathing speeds up or slows down?*

Solicit student input.

*So, while our breath is usually an unconscious, or **autonomic**, function, we can also exert conscious control over our breathing. This means we can purposefully choose how fast, how deep, and how much we breathe; we can decide our own **breath quality** and **breath quantity**. Check in with yourself right now. How deeply are you breathing? Are you breathing fast or slow? What happens if you change how you are breathing?*

Pause to allow students to monitor their breath.

*Scientists have now shown that by changing our breath through various deep breathing exercises we can change how we feel – both mentally and physically. If we are tired, we can breath quickly and wake ourselves up. If we need to relax, we can slow our breathing down and use breathing techniques to help us fall asleep. If we are stressed, we can relieve the stress through deep breathing. Studies have even shown that we can improve our brain function, control our immune system, change our blood pressure and alter the pH of our blood, influence chronic illnesses like asthma and heart disease, and possibly even influence gene expression just through deep breathing.*

*This is a big deal! Just by changing your breathing you can significantly improve your health. The best part? It's free! You already have everything you need to breathe. While you can experience many health benefits by simply becoming aware of your breath and breathing deeply, we are going to learn some specific deep breathing techniques to help us become less stressed, more focused, and more healthy.*

**Teaching Note:** In the [Academic Extensions](#) for this lesson, there are a number of student resources to explore the scientific research behind deep breathing. Depending on available class time, you may opt to teach the academic extensions first and facilitate independent studies on the science behind breathing to increase student engagement in the following deep breathing exercises.



## GUIDED PRACTICE (WE DO)

Model, and practice these deep-breathing exercises as a class. You may teach all of the exercises at once so students can note the different effects, or you may teach one at a time by spreading the lesson out over several days.

For each exercise, model the breathing technique first,<sup>5</sup> provide class time for guided practice, and provide time for students to reflect on any physical, mental, or emotional changes they notice after each exercise.

### **Breath Counting**

**Benefits:** Increases attention & focus, reduces stress & anxiety, clears the mind. Very simple.

**When to use it:** Anytime you need to calm, focus, and relax. Can be used to supplement other forms of mindfulness or as its own practice.

#### [Video Demonstration](#)<sup>6</sup>

##### **How:**

- Sit in a mindful body posture.
- Let your breath flow in and out in its natural rhythm. Do not try to deepen or alter it (this can be deceptively difficult!).
- Focus on taking breaths from your diaphragm, not your chest
- Count each exhale up to five (e.g. Inhale, exhale, “one”; inhale, exhale, “two”; inhale, exhale “three”; etc.).
- Each time you reach five, restart your count at one.
- Whenever you notice your attention has wandered and your count has exceeded five, or you got lost in thought and stopped counting, restart at one.
- Start by counting your breath for 2 – 5minutes, gradually working your way up to 10, 15, or 20-minute intervals. This exercise is simple, yet challenging!

### **Square Breathing (aka Box Breathing or Four-Square Breathing)**

**Benefits:** Calming, stress relief, anxiety reduction, regulation of autonomic nervous system, increases lung capacity.

**When to use it:** Anytime you need to calm down. This is a great technique for people who experience panic attacks or become overwhelmed by stress. Use before mindfulness practice to calm the mind.

[Video Demonstration](#)<sup>7</sup>**How:**

- Sit in a mindful body posture.
- Breathe in for four seconds.
- Hold for four seconds.
- Breathe out for four seconds.
- Hold for four seconds.
- Repeat as many times as you can (set a timer or just go as long as is comfortable).
- Gradually increase your count by one second at a time with each time you practice.

**4-7-8 Breath (aka Relaxing Breath)**

**Benefits:** Can be done anywhere in about one minute, immediately calms the nervous system and reduces stress.

**When to use it:** All the time! Practice this exercise at least twice per day for 4 – 6 weeks and you will notice significant health benefits. Use it anytime you need to release stress or tension, fall asleep, or relieve anxiety.

[Video Demonstration](#)<sup>8</sup>**How:**

- Sit in a mindful body posture.
- Place the tip of your tongue against the roof of your mouth and keep it there for the whole exercise.
- Exhale completely through your mouth.
- Close your mouth and inhale quietly through your nose for a **count of 4**.
- Hold your breath for a **count of 7**.
- Exhale through your mouth making a slight whooshing sound to a **count of 8**.
- Repeat this cycle 3 more times for a total of 4 breath cycles. Do not exceed 4 breath cycles for the first few weeks of practice. Never exceed 8 breath cycles.
- After practicing for a few weeks, you can start to use this technique in moments of stress, anger, and anxiety to calm down in the moment.



## REINFORCING LESSON CONCEPTS (YOU DO)

Use active engagement strategies or facilitate a class or small group discussion to reflect on the following questions:

- *Describe your experience with the breathing exercises.*
- *What changes did you notice in your mood, if any?*
- *What changes did you notice in the way your body felt, if any?*
- *Which exercise was your favorite? Why?*
- *Was there an exercise you did not enjoy? Why?*
- *When do you think these exercises would be helpful or useful in your life?*



## EVIDENCE OF CONCEPT ATTAINMENT

### **Reflect on it**

- *Describe your experience with the breathing exercises.*
- *What changes did you notice in your mood, if any?*
- *What changes did you notice in the way your body felt, if any?*
- *Which exercise was your favorite? Why?*
- *Was there an exercise you did not enjoy? Why?*
- *When do you think these exercises would be helpful or useful in your life?*

### **Journal it**

Pick your favorite deep breathing exercise and practice it at least once a day for 2-4 weeks. Monitor your progress in your journal, noting any changes in your mood, energy, body, sleeping patterns, or mindset each time you breathe.



## EXTENSIONS

### *Classroom*

- Create a poster reminding students of breathing exercises.
- Make deep breathing exercises a part of classroom culture and daily routine; they take as little as one minute to complete.
- Encourage students to lead exercises.
- Use deep breathing as a transition from one activity to another or whenever the class needs a boost of energy, a chance to calm down, or a tool for focusing.
- Explore other deep breathing exercises with your students; there are many more beyond these four.
- Remind students to breathe! When students have been taught these exercises preemptively, they are very useful in moments of escalation.

### *School-wide*

- Post deep breathing reminders in public spaces.
- Consider adopting school-wide norms that include quick deep breathing exercises. For example, all teachers may decide to adopt a post-recess deep breathing moment where students are asked to notice their breath and take deeper breaths. This supports a mindset shift back to classroom expectations.
- As a staff team, discuss the role of breathing in behavior response. When a student is escalated, for instance, cue a deep breathing exercise or try matching the students breathing and then begin slowing your own breath. Our brains mirror the breathing of those around us.



## REFERENCES

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