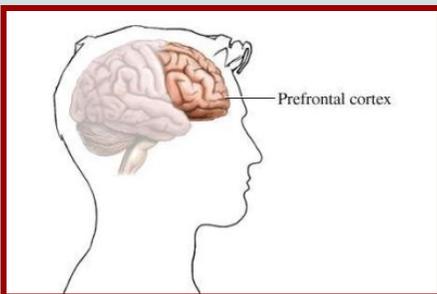


MINDFULNESS AND THE PREFRONTAL CORTEX

WHILE YOU READ, HIGHLIGHT IMPORTANT WORDS/PHRASES AND ANNOTATE THE TEXT USING COMMENTS.



Research shows that practicing mindfulness benefits the body and mind in different ways. One area of the brain on which scientists have been testing the effects of mindfulness is the prefrontal cortex (PFC). Take your hand and lay it across the top front of your head and down to your forehead. This is basically where your PFC is located. Shown in this image of the brain, the PFC is responsible for executive functions - an umbrella term that refers to a set of mental processes that help with goal-directed behavior. People use it to

perform activities such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space. One way that the PFC supports these functions is by playing a key part in the integration of the activity of different parts of the brain.

Practicing mindfulness actually stimulates the prefrontal cortex. In his book, [The Mindful Brain](#), Dan Siegel theorizes about the different aspects of well-being that are developed by stimulating the PFC through mindfulness (Siegel, 2007). Some of those aspects include:

- **Body Regulation:** the state of coordination and balance between the brakes and accelerator of the nervous system. When our body is regulated, our level of alertness and energy is appropriate to the setting.
- **Emotional Regulation:** emotional experience that is appropriately activated, so life has vitality and meaning. When emotions are dysregulated, we become overwhelmed and emotionally chaotic. When emotions are not regulated we may experience stagnation or depression or a sense that our life is not meaningful

- **Self Awareness:** our sense of ourselves, creating a coherent life story by connecting present awareness, our life story, and images of the future. This is a key to building positive social connections.
- **Fear Modulation:** our ability to calm and soothe, or even unlearn our own fears.

References: Siegel, Daniel J. (2007). *The Mindful Brain*. New York: W.W. Norton & Company.

MINDFULNESS OF BREATH

Mindfulness of the breath is a fundamental technique. Start by getting into your seated mindfulness posture. Sitting upright will help you feel the breath more fluidly. Gently close your eyes. Take a few deep breaths and notice how you feel as you breathe. Now, breathe normally and notice where you feel the sensations of breath in your body. Take a moment to find where you feel the breath most predominantly. You may notice the breath at your stomach as it goes in and out, at the chest as the ribs go up and down, or you might feel the air moving in and out of your mouth or nose. Decide where in the body you'll pay attention to the breath for this exercise. Any location is fine - but commit to the choice you make and have the intention to stay with that area of focus.

ANCHOR WORDS

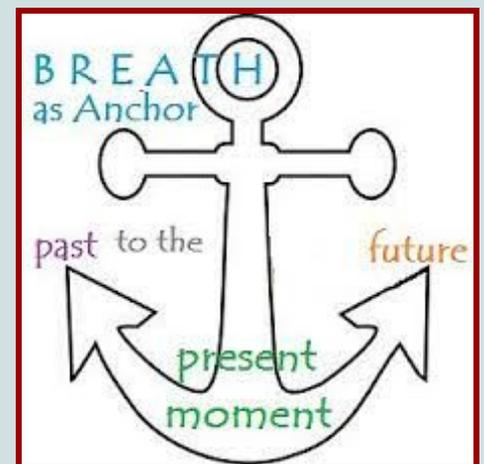
When we practice mindful breathing many experiences may arise: thoughts, sounds, physical sensations, or emotion sensations.

There's no need to control any of those experiences or make them go away. They can all take their place in the background, with the breath in the foreground. Once you are aware of something like a car honking outside, an itch on your nose or a story in the mind, recognize where the attention is, and very gently bring the attention back to the breath. The breath acts as a kind of anchor.

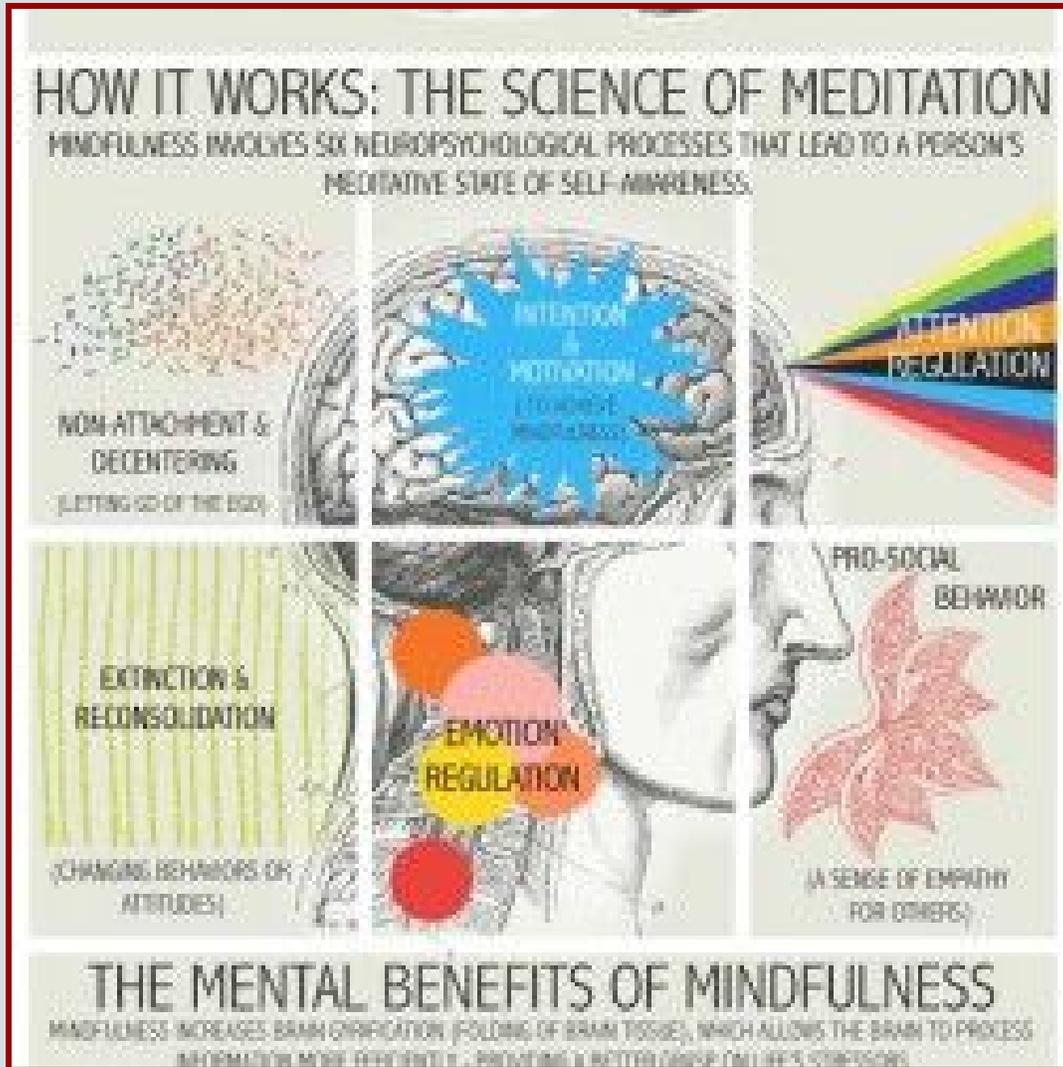
The sensations of breathing are a touchstone - an experience we can use to anchor in the present moment. To help steady your attention on something that comes up while practicing, the use of anchor words might be of help. Anchor words are mental labels that are used to point to what you are experiencing. Anchor Words can be applied to anything, but should be purely observational and not judgmental.

- If you hear a noise you can label it "hearing" or "sound".
- If you have a body sensation you can label it "itch", "tingling", "buzzing", "heat", or whatever best fits the experience.
- If it's an emotion you might label that "feeling" or a particular feeling, like "sadness" or "joy"

Avoid labeling experiences with words such as "good" or "bad". As mindfulness is "non-judgmental awareness of the present moment" - and it is that non-judgmental component that gives mindfulness the ability to provide us with tremendous clarity about ourselves and our tendencies.



WATCH THIS!



CLICK [HERE](#) OR ON THE IMAGE ABOVE TO WATCH A VIDEO

WHAT DO YOU THINK ?

WHAT INFORMATION FROM THE VIDEO IS IMPORTANT TO UNDERSTANDING THE SCIENCE OF MINDFULNESS?

TEN STEPS TO MINDFULNESS MEDITATION



Create time & space.

Choose a regular time each day for mindfulness meditation practice, ideally a quiet place free from distraction



Set a timer.

Start with just 5 minutes and ease your way up to 15-40 minutes.



Find a comfortable sitting position.

Sit cross-legged on the floor, on the grass, or in a chair your feet flat on the ground.



Check your posture.

Sit up straight, hands in a comfortable position. Keep neck long, chin tilted slightly downward, tongue resting on roof of mouth. Relax shoulders. Close eyes or gaze downward 5-10 feet in front of you.



Take deep breaths.

Deep breathing helps settle the body and establish your presence in the space



Direct attention to your breath.

Focus on a part of the body where the breath feels prominent: nostrils; back of throat; or diaphragm. Try not to switch focus.



Maintain attention to your breath.

As you inhale and exhale, focus on the breath. If attention wanders, return to the breath. Let go of thoughts, feelings or distractions.



Repeat steps 6-7.

For the duration of meditation session. The mind will wander. Simply acknowledge this and return to your breath.



Be kind to yourself.

Don't be upset if focus occasionally drifts or if you fall asleep. If very tired, meditate with eyes open and rearrange posture to more erect (but still relaxed) position.



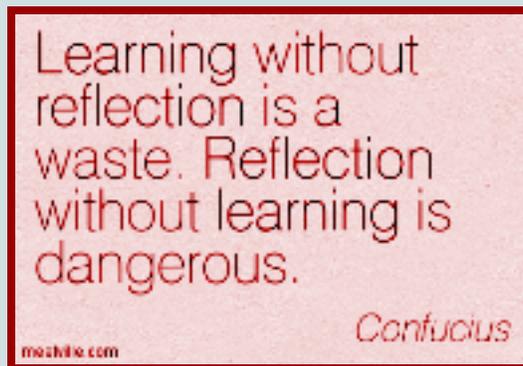
Prepare for a soft landing.

When the timer goes off, keep eyes closed until you're ready to open them. Be thankful. Acknowledge your practice with gratitude.



GUIDED MEDITATION FOCUSING ON USING BREATH AND ANCHOR WORDS

- Click [HERE](#) for Counting Breaths (2 min)
- Click [HERE](#) for Mindful Breathing (5 min)
- Click [HERE](#) for Anchor Words (10 min)



HOW CAN PRACTICING MINDFULNESS REGULARLY HELP YOU IN YOUR DAILY LIFE?

Type responses below.

...at school	
...at home	
...other (sports, art, hobbies, relationships, etc.)	