



Identifying Signs of Stress

This lesson is designed to help students identify what stress looks and feels like within their bodies. Our goal is to help them recognize signs of stress in themselves.

Essential Question

How can I develop the expertise and mindsets I need to accomplish my most important goals, despite the challenges I face along the way?

Guiding Question

What are the physical, behavioral, and emotional signs of stress? What causes stress?

Objectives

- Students will understand the fight or flight response and identify symptoms of stress.
- Students will list causes of stress and brainstorm ways schools can support students.

Advance Preparation

- Familiarize yourself with the information on the sympathetic and parasympathetic nervous systems so that you are comfortable explaining it.
- Prepare student handouts.

Materials/Resources

- PowerPoint slideshow 2.2 (adapt as needed)

Student Materials

- Paper for Do Now
- Signs of Stress, Causes of Stress, and Making School Better activity sheet
- Exit ticket: Sympathetic vs. Parasympathetic Nervous Systems handout

Vocabulary

- Sympathetic nervous system
- Parasympathetic nervous system

Do Now

2-3 min.

Slide 1: How does your body tell you if you are feeling stressed? What are some physical symptoms you experience?

Introduction (Framing/Overview)

2-3 min.

1. Slide 3: Student Dedication (30-60 seconds)

2. Tell students that today they will learn about the fight or flight response, and about what happens to our bodies when we are experiencing stress. Review the day’s agenda (slide 4).

Activity 1: Identifying Signs of Stress

10-15 min.

3. Before beginning the lesson, discuss with students some of the symptoms they identified in the Do Now (slide 5). Ask, “What does stress feel like in your body?”

Whole Class Discussion
4. (Slide 6) Tell students, “Today we are going to discuss the fight or flight response. It can be helpful to understand what is happening in our bodies, because that is one way that we experience stress.”

Direct Instruction

Ask students whether they consider stress a good or bad thing. Click to point out that there are many times when we feel ‘stressed’ or activated for good reasons. For example, if you are an athlete about to play in a game or a musician about to perform, the adrenaline rush that gets you excited also prepares your body for the match or performance.

Introduce to students the human body’s two different nervous systems: the sympathetic nervous system and the parasympathetic nervous system (slide 7). These two systems act in opposite ways.

The sympathetic nervous system (slide 8) kicks in when we are under stress (also called the “fight or flight” system). This system activates the body’s preparedness to deal with danger or a challenge. Imagine running away from a lion: to survive, you would need to muster all the energy available. The effects of the sympathetic system include:

- Pupils expand to let in more light so you can see better.
- Your heart rate increases so your blood can carry extra oxygen and sugar to your muscles, legs, arms and brain. This helps you think faster and move quickly.

- You breathe harder to provide extra oxygen for your heart to distribute.
- Because your blood is circulating more quickly, your skin becomes flushed and you may begin to tremble.
- Your body stops digesting food so that it will be able to use all its energy to deal with the danger or stress factor.

The parasympathetic nervous system (slide 9) has just the opposite effect. It is also called the “rest and digest” system. After the stressor has passed, the body returns to baseline;

- The heart rate slows down.
- You begin to digest food again.
- Your pupils go back to normal

If stressors continue for a long time, the sympathetic nervous system remains on alert in ways that aren’t healthy (slide 10). This creates other long-term symptoms, such as headache, stomachache, tiredness, irritability, and sadness. Understanding how stress produces physical symptoms can help us identify signs of stress in our bodies. Today we will learn more about ways our bodies tell us we are feeling stress.

Activity 2: Symptoms of Stress

10-15 min.

5. Direct students to brainstorm with their teams some symptoms of stress (slides 11 and 12). What are physical, emotional, behavioral, or mental signs that you or someone else is feeling stressed? Have students list as many signs as possible on the “Signs of Stress” activity sheet.

Cooperative Learning

Invite students to share some signs they identified (slides 13-16):

Whole Class Discussion

- What are some physical signs of stress?
- What are some emotional signs of stress?
- What are some behavioral signs of stress?
- What are some mental symptoms of stress?

Ask students (slide 17), “Why might it be helpful for you to identify these signs of stress in yourself? Why might it be helpful for you to identify these signs of stress in someone else?”

Activity 3: Causes of Stress

10-15 min.

6. Tell students, “Now that we have talked about what stress looks like, let’s think about what may cause it in ourselves. With your group, brainstorm different situations or experiences that may cause stress

Cooperative Learning

among teenagers” (slide 18). Have students write responses at the top of page 2 of the activity sheet.

7. After teams have had time to brainstorm, direct them to discuss ways that schools can help support students better (slide 19). Students should come up with 3 creative solutions or ideas that can make schools better for students and write them down in the Making Schools Better section of their activity sheets.

Closure

5-8 min.

8. Have student teams report some of the causes of stress they identified, as well as some of their suggestions for making schools better.
9. Exit ticket: Students complete the “Stress Response: Sympathetic vs. Parasympathetic Nervous System” activity sheet.

Extensions

For homework, you could have students write a journal entry describing a stressful experience, or identifying the top two stressors in their lives.

Signs of Stress Activity Sheet

Stress is your body’s responses to events around you. Stress can be both positive and negative; if you decide to run a 5K race and begin training, your body will experience a good stress. If you break your leg, that is a bad stress. Sometimes stress is both positive and negative. Ideally, your level of stress should be motivating, not overwhelming or draining. Too much stress will exhaust your body and mind and lead to serious health problems.

Stress affects your mind and your body. It causes powerful feelings and biological changes. Your body responds with a “fight or flight response.” It is ready to fight to defend itself or run away to be safe from danger. Your heart speeds up. Stress hormones flood your body, preparing you for action. You may feel highly alert and focused. But if the stress continues, you will experience negative consequences.

List as many symptoms of stress as you can in the chart below.

Physical Symptoms	Emotional Symptoms
Behavioral Symptoms	Mental Symptoms

Causes of Stress

Making School Better

Based on what you have learned about stress and some of the causes, what are ways we can make school less stressful? How about ways we can help students manage stress? With your team, brainstorm some ideas for principals, teachers, and in general.

Ideas for the principal

Ideas for teachers

General ideas

The Stress Response: Sympathetic vs. Parasympathetic Nervous System**The Sympathetic Nervous System****Stress Response**

Revs you up, preparing you to fight, take flight, or freeze

- Heart beats fast
- Breath is fast and shallow
- Pupils expand to take in more light
- Stop digesting food
- Blood rushes to your muscles
- Hormones rush through your body
- High energy use

**The Parasympathetic Nervous System****Relaxation Response**

Calms you down, preparing you to rest, think, and recover

- Heart beats slow and rhythmic
- Breath is full and slow
- Pupils return to normal
- Food digestion resumes
- Blood flow returns to your gut and lungs
- Hormones lift your mood and help you relax
- Saves energy



What are three differences between the stress response and the relaxation response?

1. _____

2. _____

3. _____

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