

GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

Sponsored by



LESSON 3.28

Natural Health

Unit:
MISCELLANEOUS

PRECEPTS

G. Physical Growth
G2. Respect one's body

NATIONAL STANDARDS

NRS.01.02.02.b. Identify herbaceous plants.
NL-ENG.K-12.12 – Applying Language Skills
NS.5-8.1 – Science as Inquiry



Lesson Type:
Large Group

STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

- List five plants that have healing properties.
- Cite examples of stressful situations and ways to reduce harmful *stress*.





TIME

Instruction time for this lesson: **50 minutes.**



RESOURCES

Live and Feel. (2010). Medicinal plants. Retrieved January 31, 2009, from Live and Feel website: <http://www.liveandfeel.com/>

National FFA Organization. (2010). LifeKnowledge Precepts and Signs of Success.

What is stress? (2010). Understanding and dealing with stress. Retrieved January 31, 2009, from Mountain State Centers for Independence website: <http://www.mtstcil.org/skills/stress-definition-1.html>



TOOLS, EQUIPMENT AND SUPPLIES

- ✓ Aloe vera plant
- ✓ Celery stalk
- ✓ Clove of garlic
- ✓ Sprig of fresh parsley
- ✓ Marigold plant
- ✓ PALS3.28.LG.AS.A – one (*use only if actual plants are not available*)
- ✓ PALS3.28.LG.AS.B – one (*use only if actual plants are not available*)
- ✓ PALS3.28.LG.AS.C – one (*use only if actual plants are not available*)
- ✓ PALS3.28.LG.AS.D – one (*use only if actual plants are not available*)
- ✓ PALS3.28.LG.AS.E – one (*use only if actual plants are not available*)
- ✓ PALS3.28.LG.AS.F – one per student
- ✓ Crayons, markers, or colored pencils – enough for students to share and work at the same time
- ✓ PALS3.28.LG.ASSESS.A – one per student



KEY TERMS

The following terms are presented in this lesson and appear in ***bold italics***:

Medicinal Plant

Stress



CONTENT OUTLINE

Objective 1. | List five plants that have healing properties.

- I. Plants and their healing properties
 - A. **Medicinal plant** – plant used to treat a medical condition; plant with properties that help in the healing process
 - 1. Aloe vera – aloe gel, a thick liquid found in the interior of the leaves, is used in the treatment of burns
 - 2. Celery – used as a diuretic by those who have urinary retentions or kidney or illness
 - 3. Garlic – used to treat pharyngitis and intestinal infections and counteracts flu symptoms/complications
 - 4. Parsley – used to eliminate toxins and kidney stones
 - 5. Marigold – stimulates blood circulation and speeds up the healing of wounds

Objective 2. | Cite examples of stressful situations and ways to reduce harmful *stress*.

- I. Reducing **stress**
 - A. **Stress** – the body’s way of responding to any kind of demand
 - 1. Survival **stress** – caused by danger
 - a. Climbing a tree
 - b. Being chased
 - 2. Internal **stress** – caused by worrying about things
 - a. Worrying about an upcoming test
 - b. Worrying about a sick relative
 - 3. Environmental **stress** – caused by things around you such as noise, crowds, work, or family
 - a. Family members arguing
 - b. Being in a crowded room with a lot of people talking loudly
 - 4. Fatigue – builds up overtime and is caused by working too much or too hard
 - a. Practicing a sport excessively
 - b. Staying up late working on a project or assignment
 - B. **Stress** reduction techniques
 - 1. Deep breathing
 - 2. Muscle contraction

INTEREST APPROACH

Line up the five plants in front of the room for all students to see. If actual plants are not available, use PALS3.28.LG.AS.A through PALS3.28.LG.AS.E to show students.



Look at these five plant specimens. *Hold each one up as you say its name.* We have aloe vera, celery, garlic and marigold. Think about this question: What do these five plants have in common? *The correct answer is that all plants have medicinal value. Pause for a few seconds while mentees think.*

Who will answer?

Facilitate a discussion allowing various students to respond to the question. Students may reference the color, refer to the vegetables, discuss that they have roots, etc. If the correct answer is not given, continue.



While all of these are plants and do grow from roots, there is something else they have in common. Each of these plants has medicinal value – that is, they can be used for our health. Today, we will discuss how these plants can be helpful to humans and we will also discuss other strategies to living a healthy lifestyle. There is a lot of information to learn, but do not **stress**. We need to be relaxed as we continue through this lesson. If you are not relaxed now, hopefully we will take care of that by the end of the lesson.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

OBJECTIVE 1. | List five plants that have healing properties.



In this part of the lesson, use PALS3.28.LG.AS.A.



We will soon receive an activity sheet showing a picture of each of the five plants we will discuss. As we discuss each plant, please describe its medicinal value to the right of the picture.

Before modern medicine, people relied heavily on local plants to help ease their aches and pains. A variety of plants, such as these shown here (*gesture to plants*), can help treat a variety of medical conditions. Some of these plants can be purchased at the local grocery store while others can be grown in your home.



Before we get into a discussion about the medicinal value these plants hold, be reminded that we should never attempt to use a plant as medicine without the supervision of an adult or a doctor's consent.

I. Plants and their healing properties

When a plant has capabilities that can be used to treat a medical condition or aid in the healing process, it is called a **medicinal plant**.

A. **Medicinal plant** – plant used to treat a medical condition; plant with properties that help in the healing process

Distribute PALS3.28.LG.AS.A and continue.



Before we get into a discussion about the healing power of each of these plants (*gesture to plants*), who will take a guess at what each plant might be used for?

Pause and allow various students to offer an answer. If no response is given, continue with the discussion. Hold each of the plants up and, using the information below, describe the medicinal value. Go slow enough so each student can write down this information on the activity sheet.

1. Aloe vera – aloe gel, a thick liquid found in the interior of the leaves, is used in the treatment of burns
2. Celery – used as a diuretic, (helps to flush out the body) by those who have urinary retentions or kidney illnesses
3. Garlic – used to treat pharyngitis and intestinal infections and counteracts flu symptoms/complications
4. Parsley – used to eliminate toxins and kidney stones
5. Marigold – stimulates blood circulation and speeds up the healing of wounds



Thank you for being so attentive. Now, let's do a quick check for understanding. Turn your activity sheet over.

Pause while mentees do this.



Here is a question – which plant is used to help remove kidney stones?

Allow students to answer.



Great, parsley does this. Another question – if someone had a burn, which plant could be used to relieve the pain?

Allow students to answer.



Nice work – Aloe vera is used to treat burns.

Let's think about burns for a few seconds.

Pause while students think.



Fire can be very dangerous as can other things. When faced with danger, such as getting burned, how do our bodies respond? Who will answer?

Facilitate a discussion about this question. Students may say that they get nervous, their palms get sweaty, etc. Continue.



Our bodies may respond differently when facing danger – this response may be referred to as **stress**. As we move into a discussion about **stress**, be prepared to consider different situations that may cause **stress** and discuss methods that will help you relieve **stress**.

OBJECTIVE 2. | Cite examples of stressful situations and ways to reduce harmful stress.



Stress is a word we may have heard before, but its definition can be confusing. **Stress** is the body's way of responding to any kind of demand. For example, if a situation requires that you run, that could be stressful. If a situation demands that you stay somewhere that you are uncomfortable, that could be stressful.

II. Reducing stress

A. Stress – the body's way of responding to any kind of demand

There are four different kinds of **stress** we will discuss. Each type of **stress** is caused by different situations. The first type of **stress** is survival **stress**. Survival **stress** is caused by danger. Who will give an example of a dangerous situation?

Allow a few students to respond.



Excellent – these are all dangerous situations that might cause us to be concerned about our survival. Other examples include climbing a tree or a ladder, where we could possibly fall and hurt ourselves, or possibly being chased by someone or something.

1. Survival **stress** – caused by danger
 - A. Climbing a tree or ladder
 - B. Being chased

Another type of **stress** is called internal **stress**. This occurs when we worry too much about things. Turn to someone sitting nearby and tell them something that we might worry about.

Pause while students chat for a few seconds.



Nice work and great conversations. Who will share what we might worry about?

Allow a few students to respond and then continue. If students did not say worrying about a test or a sick relative, provide those answers.

2. Internal **stress** – caused by worrying about things
 - A. Worrying about an upcoming test
 - B. Worrying about a sick relative



Next, we will talk about environmental **stress**. This type of **stress** is caused by things around us such as noise, crowds, work or family. Perhaps you may have heard adults talking about being stressed by their jobs – this would be an example of environmental **stress**. Another example would be family members arguing or being in a crowded room with a lot of people talking loudly. These things involve our surroundings or our environment.

3. Environmental **stress** – caused by things around you such as noise, crowds, work or family
 - A. Family members arguing
 - B. Being in a crowded room with a lot of people talking loudly

Finally, we will talk about **stress** caused by fatigue. Fatigue may be described as a temporary loss of energy or strength. Some translate the word to mean being tired. **Stress** from fatigue builds up over time and is caused by working too hard or too much. After an extended amount of physical activity, such as during practice for a sport, how might we feel?

The correct answer is “tired” or “fatigued.” Pause and allow students to respond. After a few guesses, provide the correct answer if no one says it.



Others may have stayed up really late working on a project or assignment – this can cause fatigue. What are some more examples of things that might cause **stress** by fatigue?

Allow a few students to respond.

4. Fatigue – builds up over time and is caused by working too much or too hard
 - a. Practicing a sport excessively
 - b. Staying up late working on a project or assignment

Thank you for the great discussion. We all experience **stress** from time to time. It is important to not let **stress** take over our lives. There are a few things that we can do to eliminate **stress**. As we prepare to talk about reducing **stress**, please grab a towel (*mat or blanket*), find a place on the floor and sit down. We will continue once everyone is seated on the floor.

Pause while mentees find a place on the floor to sit down. If students do not have a towel, they can still participate.



Thank you. Today, we will discuss two different techniques that can be used to reduce **stress** in our lives – deep breathing and muscle contractions. First, we will talk about deep breathing. Deep breathing is a technique that many people use to calm themselves down when they feel stressed. Now, we will practice deep breathing. We will be ready to begin when everyone's eyes are closed.

Pause while mentees close their eyes – observe for all eyes to be closed.



Thank you. When we practice deep breathing, we will breathe in deeply, pause and hold our breath for three seconds, and then exhale slowly. This helps calm us down because, sometimes, when stressed, we breathe quickly. For the next minute, we will all practice deep breathing. Remain silent – the only sounds we should hear are the sounds of inhales and exhales. What questions are there before we begin?

Observe for questions and then continue.



Okay, begin deep breathing and continue until you hear the word STOP.

Keep time for one minute. After one minute, say stop.

- B. **Stress** reduction techniques
 1. Deep breathing

STOP



Open your eyes please. How did it feel, sitting down and focusing on taking deep breaths?



Allow a few students to respond and then continue.



The second technique we will practice for **stress** relief is muscle contraction. This requires that we focus on contracting or flexing different muscles in our body. We have to think about contracting muscles and this helps relax us because it takes our mind off of things that may be causing **stress**.

Let's practice contracting some muscles. First, let's contract or squeeze the muscles in our neck. Try that for a few seconds.

Pause a few seconds while mentees do this.



Fantastic. Next, let's contract the muscles in our back.

Pause a few seconds while mentees do this.



It is not easy to contract some of these muscles without concentrating hard. Now, we will practice contracting various muscles in our body for one minute. Listen for instructions on which muscle to contract. What questions are there?

Observe for questions and then continue.



Alright, let's start muscle contraction with our neck.

Allow students to contract their neck for 10 seconds. After 10 seconds, tell them to move to their back for 10 seconds, then their arms for 10 seconds, their legs for 10 seconds, their feet for 10 seconds, and finally, their entire body for 10 seconds. After one minute, tell the group to RELAX.

2. muscle contraction



How did it feel to contract the various muscles?

Pause and allow students to respond. If time permits, allow students to practice a third round of stress relief techniques as they choose. Tell them they can combine deep breathing with muscle contraction.



Thank you all for participating in the **stress** relief techniques. Sometimes deep breathing and muscle contraction makes us sleepy because we are so calm, but we can't sleep yet. Since we are all relaxed, it should be easy to tap into our creative side as we prepare to become artists.



REVIEW / SUMMARY

In this review utilize the Picasso e-Moment® to have students illustrate what stressful environments look like to them. Each student will use the back of his/her assignment sheet. Utensils for drawing/coloring (Crayons, markers, colored pencils, etc.) should be available for students to share. You will instruct students to draw a picture on the back of the medicinal plants assignment sheet (PALS3.28.LG.AS.A) that illustrates/represents a stressful situation. Students will then be asked to pair up and explain how their picture represents stress and how they could relieve that stress. After students have completed this activity, you can have a gallery walk, if time permits. A gallery walk allows students to walk around and look at the artwork of their classmates.



Perhaps the name Pablo Picasso is familiar? Picasso was a Spanish painter who spent a lifetime creating images of life as he saw it. There is a little Picasso in each of us and today, we are going to let that creative ability out. Recall some of the different types of **stress**. *Pause for a few seconds while students think.* We all have an assignment sheet that discusses **medicinal plants**. Also, (insert name of coloring utensil – markers, crayons, etc.) are available to use for our final activity today (gesture to coloring utensils). When I say DRAW, draw a picture illustrating a stressful situation. Please draw this on the back of the assignment sheet. Everyone will draw one picture. After creating the artwork, we will explain to a friend the stressful situation that our pictures represent and how we could relieve that **stress**. If time permits, we will walk around and look at everyone's artwork. Five minutes will be allotted to create these illustrations. If we are ready to begin drawing and have no questions, hold the assignment sheet in the air. *Observe for comprehension – answer questions if necessary.* This should be a fun activity for us all – ready?

DRAW

As students are drawing, watch the clock for time – you may not need the full five minutes and you may have to adjust to give more time. Once students have completed this activity, instruct them to explain their pictures to a friend. If time permits, then facilitate a gallery walk.



Excellent job with the illustrations - there may be some future artists among us. Hopefully today's activities will help us remember different things that we can do to help keep our lives **stress** free. There are many ways that we can maintain a healthy lifestyle without visiting a doctor. Using **medicinal plants** and **stress** relief techniques are a few examples. As we continue throughout today and the rest of our lives, remember that a **stress** free life is a happy life.



APPLICATION

One-on-One Idea

Students can perform an Internet search and identify other plants that have medicinal value. Have the students draw or print a picture of the plant and explain its medicinal value to the class.

Continued Discussion

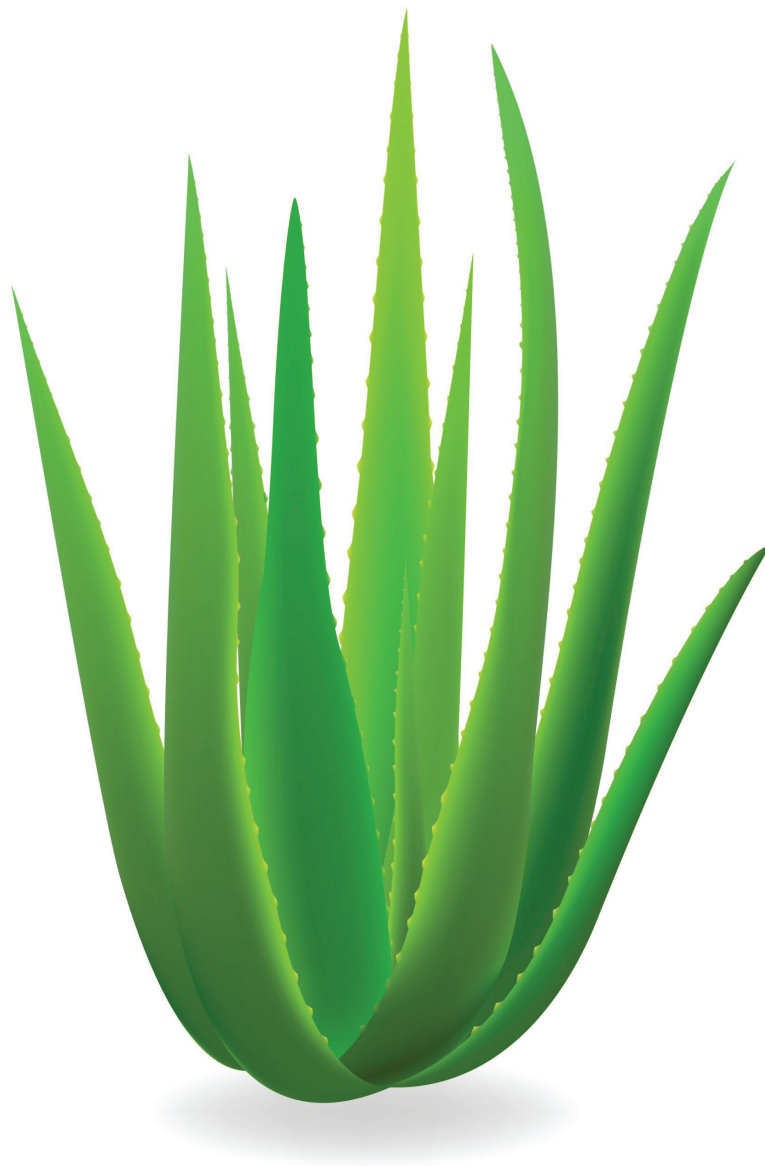
Bring in a music CD that has relaxing sounds such as waves or other sounds of nature. Have the students sit on the towel, mat, or blanket and close their eyes while listening to the music. Instruct the students to practice deep breathing and muscle contraction while focusing on the sounds and clearing their minds.



PALS3.28.LG.ASSESS.A | EVALUATION KEY ANSWERS

1. a
2. a
3. c
4. a
5. c

PALS3.28.LG.AS.A



Aloe vera

PALS3.28.LG.AS.B



Celery

PALS3.28.LG.AS.C



Garlic

PALS3.28.LG.AS.D



Parsley

PALS3.28.LG.AS.E



Marigold

PALS3.28.LG.AS.A

Name _____

Directions: Beside each plant name below, describe its medicinal value.

Aloe vera



_____, a thick liquid found in the interior of the leaves, is used in the treatment of _____

Celery



Used as a _____ by those who have urinary retentions or _____ illnesses

Garlic



Used to treat pharyngitis and _____
infections and counteracts _____ symptoms

PALS3.28.LG.AS.A *(continued)*

Parsley



Used to eliminate _____ and _____ stones

Marigold



Stimulates _____ circulation and speeds up the _____ of wounds

PALS3.28.LG.ASSESS.A

Name _____

Directions: Read each statement and decide whether it is true or false.

1. _____ Some plants have medicinal value.

- a. True
- b. False

2. _____ Being tired may cause stress.

- a. True
- b. False

Directions: Read each question and circle the response that best answers the question.

3. _____ Which of the following is an example of environmental stress?

- a. Exercising to the point of exhaustion
- b. Standing near the edge of a cliff
- c. Really loud noises such as screaming or yelling
- d. All of the above answers

4. _____ Which of the following is not an example of internal stress?

- a. Being in a crowded room
- b. Having anxiety over an upcoming test
- c. Hoping that people will not laugh at your new haircut
- d. Thinking about someone you know who is sick

5. _____ Which of the following are ways that you can relieve stress?

- a. Slow breathing
- b. Muscle contraction
- c. Both a. and b.
- d. None of the above answers