

Textures in Nature *Part 1: Understanding Texture*

Swiping your feet over the grass or rolling a pinecone in between your hands, observing the clouds in the sky, or looking closely at moss growing on a rock - these are all examples of actions that can give you a sense of texture, two of which are tangible (it can be held and touched) and the other two, implied (it is experienced mentally as related to other senses).

In this 3-part series about textures in nature, we will be exploring the physical sensations associated with natural surfaces within the scope language, anatomy, and art.

Part one includes language arts and using one's imagination, then sensory exploration and implication.

Textures and Language Arts

Textures are everywhere, but how do we describe them? Adjectives are words that can be used to help define a person, place, or thing. We can use them to modify nouns which allows the speaker or writer to create a deeper level of description. They help us explain things like texture, size, shape, and color.

Some examples of adjectives are fluffy, big, round, yellow.

Ex. I saw a fox in the meadow, it looked fluffy.I touched a big leaf growing in the woods, it was a skunk cabbage plant.I looked up at the sun and it was round and yellow.

Adjectives and descriptive words elevate poems and stories. Detailed narratives of surroundings allow the reader to better imagine that environment or feel like they are really there. We are going to practice brainstorming and using descriptive words in writing.

If you want to understand more about parts of speech, check out this article.

Activity 1: Adjective Generator

Use the space below to come up with your own adjectives.

Adjectives – a word that modifies a noun Example: Smelly cat

Adj. Noun



How many adjectives that you thought of above also describe texture? Use the space below to brainstorm more words that describe texture.

Texture words Example: *Rough* rocks

Now that you have brainstormed some adjectives, try using them to heighten your own story telling. Get creative! Write a nature poem or a short story using your descriptive words that includes exploring textures in nature and natural spaces.

Here is an example of a descriptive nature poem:

Spring By David Feng

Beautiful fresh purple flowers on a hill Slowly moving water mill Clumps of wet frost on the ground Life is all around Soft grasses pop out Flowers sprout Chirping birds in the woods Weather is good Melting mountain has begun Frosty snow quickly runs Bright, shiny sky is clear Sweet, fresh, crispy smell fills the air

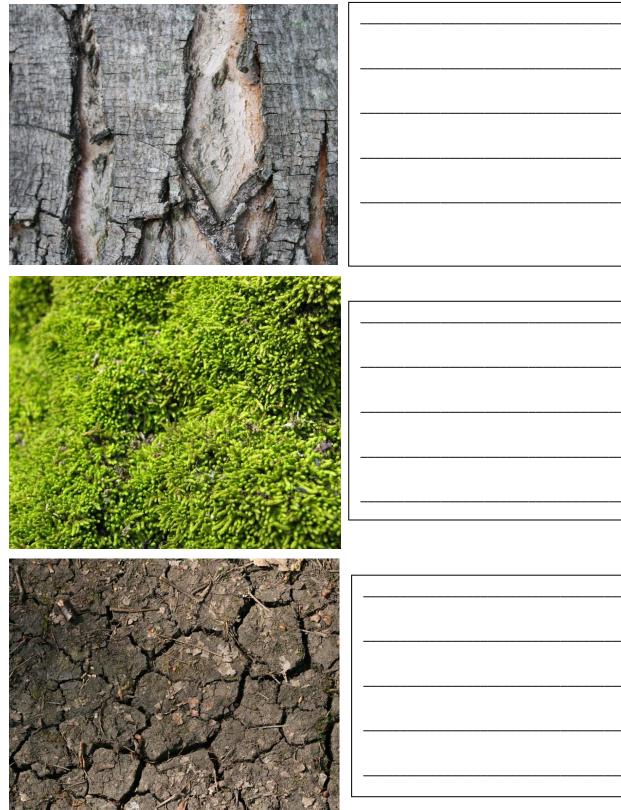
Purple words are adjectives Orange words are nouns

Read poem online here.

For help choosing and understanding poetry styles, use this guide.



Activity 2: Textures in Nature Use a few descriptive words to explain the texture of the natural items below.

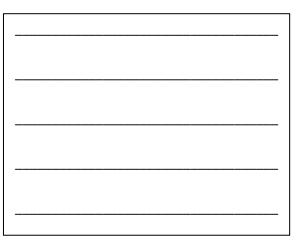




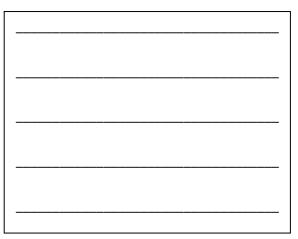














Imagining Textures

Activity 3: Stop and Think

The natural world allows us to explore so many different textures. For this **Stop and Think** exercise you will need to find a comfy place to sit, inside or outside. This activity can be done with a facilitator or you're welcome to try it on your own.

Sit in a comfortable position. Close your eyes. With a controlled breath, deeply inhale through the nose for 5 seconds, and then exhale through the mouth for 5 seconds. Do this again 2 more times.

Return to your normal breath.

With your eyes still closed imagine yourself standing in front of a tall, sturdy tree. You reach your hand out to touch the bark. How does it feel to your touch? ... Is it smooth like beech tree bark? Or deeply grooved like a mighty oak tree?

•••

A leaf falls from a tree. You pick it up to examine it. ... Is it a leaf from the same tree you have just touched? ... Does it have smooth edges? Or does it have serrated edges? ... How does it feel? ... Is it a soft, fresh leaf or is it a dry, dingy leaf?

•••

You continue walking and find a steadily flowing stream. You dip your feet into the water ... You touch the rocks in the stream with the bottoms of your feet ... How do the rocks feel when you run your feet over them? ... Are they smooth? Bumpy? Rough?

•••

Open your eyes.

Reflect on the many textures of nature. Does being able to describe some surfaces of the outside environment make you feel more connected with it? Did you come up with any adjectives that you might not have thought you would use to describe items in nature?

If possible, share your experience with your peers. The beauty of this exercise is that everyone has their own journey. Some people could have imagined that they were in a forest, while other imagine a park in the city. Some people may have thought of a place that already exists, while others may have created their own unique scene.



Texture Sensory Exploration

The world is full of textures of all types, so our bodies have adapted to experience them in many different ways using our *senses*. There are 5 senses, **touch**, **taste**, **sight**, **smell**, **and hearing**, which are used in different combinations and intensities (or sometimes not at all, so we should explore that as well!). When we think about texture, we mostly associate it with our sense of touch, but can we combine any other senses into our experience?

In this section, we will study how some of our senses work to allow us to enjoy the richness of our textured world.

Activity 1: Create a Touch Box

This is a super easy and adaptable craft that you can use to learn different textures and even help build important sensory skills in young children. A touch box is simply a box you can use to conceal an object and then have someone reach inside to feel the object without seeing it.



Spend some time outside or in your home exploring objects that have different textures, shapes, and sizes to include in your touch box. Be creative by decorating the outside of it!

Can you identify the object by touch alone? Can you use the descriptive words from the Language Arts section to describe the object even if you cannot see it? Were you hesitant to touch something that you could not see? Does this tell you something about how your senses are supposed to work together?

Activity 2: Explore 'Implied Texture'

Each of the five senses have evolved to work both individually and in combination with the others to help us perceive the world around us. Sight and touch are very closely related, which makes it possible for one to influence the experience of the other and teach us about interacting with the world. If you see a rose bush covered in sharp thorns, are you going to grab the stem? No, of course not; you probably know that the thorns will cause the physical sensation of pain in your hand, and you can imagine how it feels without actually touching it.

These sensory experiences that are happening only in your mind are *implied*. You can experience *implied texture* when you look at a two-dimensional image of something that is made to look three-dimensional, like this incredibly realistic pencil drawing. Can you "feel" the softness of the cat's fur in your mind even though it's not a real cat?



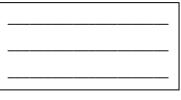
Image courtesy of artist Paul Lung



Take a look at the images below and describe the physical sensations they imply. Be creative in your descriptions!

















We hope this article has opened your mind to the world of textures in nature. Throughout your day, think about the different textures you encounter. Spend time describing the world around you and be mindful of how many things your senses pick up on. Join us again soon for Part 2 of Textures in Nature.

Extensions

Did the colors of these images influence how you experienced the implied texture? How do you relate to colors? We talked about how texture and sight are very well suited to work together, but what if someone is visually impaired? Check out this video by Molly Burke in which she explains her experiences of color and its implied relationships to her other senses due to her blindness.

Sample Learning Standards

The topic of texture can really be aligned with an assortment of Learning Standards, contingent upon your own learners' needs and the objectives you define.

The following are just a few examples:

Next Generation Science Standards

- 2-LS2-1. Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).
- 2-LS4-1. Connections to Nature of Science Scientific Knowledge is Based on Empirical Evidence: Scientists look for patterns and order when making observations about the world. When looking at tree bark, students will note that the texture is specific to the species of tree. Observing and recording these textures, allows individuals to identify the tree.
- 2-LS4-1 K-2. Engineering Design K-2 ETS1-2 Crosscutting Concepts Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).
- 4-LS1-1. Construct an argument that plants, and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
- A "Big Question" to pose to your students might be: Do the textures of plants and animals support their survival?



New Jersey Learning Standards ELA

- NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- L.4.5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

These are just a few ideas on how to incorporate this lesson into Language Arts lessons. Using textures in your class my prompt students to use a richer "word bank" when writing poetry or perhaps their own stories. When students are afforded the opportunity to hold and manipulate natural items, and discuss this experience with others, their expressive language may be enriched and prompted to an elevated level.

For more ideas on how you may incorporate the topic of textures in nature into your lessons, contact Kate Reilly, Manager of Education, Duke Farms at kreilly@dukefarms.org