

Grade 1 Curriculum Link Ideas

Subject	Unit	Season	Activity	Description
Science	Creating Color	Spring, summer, fall	Color hunt	Student read and then find different colors in the naturalization area (Language arts, as well).
		Spring, summer, fall	Garden smudges	Students read the words of different garden objects and then locate and make color smudges with the object.
	Senses	All	Meet a tree	While one student has their eyes closed, their partner will lead them to a tree. Students with their eyes closed will then explore the tree with their sense of touch and smell. Once they have returned to where they started, they must find their tree with their eyes opened.
		All	Texture hunt	Students read a descriptive texture word and then locate something with that texture in the naturalization area.
		All	Sensory Hunt	Students look for and describe different things they can see, hear, touch, smell and taste.
	Needs of Plants and Animals	Spring, summer, fall	Habitat Survey	Students study an animal habitat outside and answer questions.
		All	Spring Scavenger hunt	Students spend time looking for nature items.
	Seasons	All	Four Seasons of a Tree	Have students spend a few days each season observing the same tree or shrub. Do sketching and journaling during these sessions.
Math	Measurement	All	Measurement hunt	Students learn mm, cm and meters looking for different objects of different lengths.
	Geometry	All	Shape Hunt	Hunting for different shapes in nature.
Language Arts		All	Group Poem	Divide students into groups of 3-5 to write a collective poem about something in the naturalization area. Each Student should be responsible for at least one line. Have students present their poems at the end of class.
		All	ABC's in Nature	Hunting for natural objects starting with all the letters of the alphabet.
Art		Spring, summer, fall	Leaf chromatography	Testing the color pigments in leaves and flowers using filter paper.
		All	Craft Ideas	See craft ideas PDF.
PE		All	Camouflage game	One student is the prey and all others are the predators. The prey closes his eyes and counts to 10. All the predators must run and camouflage themselves in the surrounding trees and shrubs. The prey then opens his eyes, and staying in one spot, looks around to see which of the predators he can spot. If he spots anyone he must call their name and yell 'starve'. These players are now out of the game. When he cannot see any other predators, the prey will close their eyes and count to 10 again. Remaining predators must then attempt to get closer to the prey without being spotted. Repeat the above process a few times and the winner is the predator that gets the closest with out being spotted by the prey.

Habitat Survey

Name _____ Date _____

General weather on this day _____

Name of your animal _____

1. Take the temperature of the site you are surveying. _____

2. Look around for sources of moisture. Record any observations below:

3. Using the light meter, measure the light on your site. Record your findings

4. Look for areas that your animal might find shelter. Record and describe your findings below:


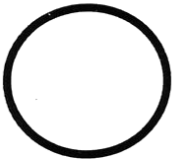


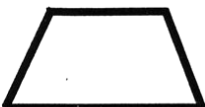
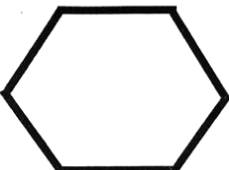
5. Look for potential sources of food for your animal. Record your findings below:

6. Do you feel your animal would find this a suitable habitat? _____

7. Why or why not? What other elements would your animal need?

Shape Hunt

Name _____

Shape	What was it?	Where did you find it?
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Name _____

ABC's in Nature Scavenger Hunt

A	N
B	O
C	P
D	Q
E	R
F	S
G	T
H	U
I	V
J	W
K	X
L	Y
M	Z

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Leaf Chromatography

Purpose: To demonstrate the separation of pigments in leaves through the process of chromatography

Materials: Coffee filters
Pencil
Small jar or cup
Tape
Leaves
Acetone

Description: Plant pigments play an important role in capturing light for the photosynthetic process. Each of these pigments is responsible for the colors we see in leaves because they reflect light at that wavelength.

Example:

Chlorophyll reflects green light
Anthocyanins reflect red light
Carotenoids reflect yellow light

Directions:

This activity should be done outside, or in a very well ventilated area.

Choose leaves carefully. Soft leaves are good. Avoid hard waxy leaves common on ornamental shrubs. Leaves that show red and yellows or ones that change colors in the Autumn do well. (Tulip tree, cherry trees, and maples are most desirable.)

Discussion

As the acetone moves up the paper, the pigment dissolves into it. Because of the different characteristics of the pigments in the leaf, some pigments move faster than others.

During the spring and summer, the red and yellow pigments are masked or hidden by large amounts of chlorophyll in the leaf. This is not unlike making a batch of chocolate chip cookies. If we added ten pounds of flour, five chocolate chips, and a pinch of sugar, what would we taste? Flour. Similarly, we only see the chlorophyll because there is such a large amount. So why are the other leaves red? Because they have already changed for the season. In fall, chlorophyll breaks down and reveal the wide range of colors produced by these other pigments. This occurs because during the fall, the tree is forming a plug at the base of the stem, which cuts off the water to the leaf. Because there isn't any water, the leaf stops making food, chlorophyll breaks down, and we start to see the other colors.