

Integrated Learning Segment

Two-Week Thematic Unit for Kindergarten

By: Payton Morrell and ECED 4450 Spring 2018 class

Focal Science Standard(s): **K.LS1: From Molecules to Organisms: Structures and Processes**

1) Use information from observations to identify differences between plants and animals (locomotion, obtainment of food, and take in air/gasses).

Theme/Topic: Differences between plants and animals

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Introduction and Rationale (a)

This integrated learning segment is...

The 2-week unit will focus on plants and animals and ways that they are different. Children will explore plants and animals in various ways with teacher provided materials. This topic is being chosen for kindergarten to help children gain base-knowledge about the world around them. This unit is specifically focusing on locomotion, obtainment of food, and taking in air/gasses. These three focus points will be very intriguing for young students. They may ask questions such as "are plants alive?". These are the sort of misconceptions are what this unit will help to correct. By the end of the unit students will know the differences between plants and animals. This unit will follow the 5Es, this will be done by engaging students in activities and discussion, children will explore and conduct experiments, teachers will follow students experiments and will give formal explanations of concepts for the students, teachers will also encourage students to elaborate on their thinking and apply new concepts to problems, teachers will also evaluate the students and their performance and assess the learning (Yoon, Onchwari, 2006).

Standard/s Addressed, Goals, and Objectives for the Unit (b)

Standards addressed. The primary focal standard is in the kindergarten section From Molecules to Organisms: Structures and Processes

- 1) Use information from observations to identify differences between plants and animals (locomotion, obtainment of food, and take in air/gasses).

K.ETS1: Engineering Design

- 2) Describe objects accurately by drawing and/or labeling pictures.

Other standards addressed from the English language arts section are

K.FFL.WC.4 Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a. Write uppercase and lowercase manuscript letters from memory. b. Write a letter/letters for most consonant and short vowel sounds (phonemes). c. Represent phonemes first to last in simple words using letters (graphemes) such as rop for rope. d. Spell VC (at, in) and CVC (pet, mud) words with short vowels; spell V (a, l) and CV (be, go) words with long vowels. e. Identify the letters used to represent vowel phonemes and those used to represent consonants; know that every syllable has a vowel. f. Write some common, frequently used words (am, and, like, the). g. Print many upper and lowercase letters.

K.FFL.F.5 Read with sufficient accuracy and fluency to support comprehension. a. Read emergent-reader texts with purpose and understanding.

K.FL.VA.7b With guidance and support from adults, explore word relationships and nuances in word meanings. i. Sort common objects into categories to gain a sense of the concepts the categories represent. ii. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites. iii. Make real-life connections between words and their use. iv. Distinguish shades of meaning among verbs describing the same general action.

K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Standards being addressed from the kindergarten math section are

K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

K.MD.C.4 Sort a collection of objects into a given category, with 10 or less in each category. Compare the categories by group size.

K.CC.A.1 Count to 100 by ones, fives, and tens. Count backward from 10.

Standards from social studies section are

K.5 Distinguish between wants and needs.

K.6 Identify and explain how the basic human needs of food, clothing, shelter and transportation are met.

K.23 Identify sequential actions, including first, next, and last in stories and use them to describe personal experiences.

K.24 Use correct words and phrases related to chronology and time (now, long ago, before, after; morning, afternoon, night; today, tomorrow, yesterday, last or next week, month, year; and present, past, and future tenses of verbs).

K.28 Use a combination of drawing, dictating, and writing to narrate a single event or several related events.

Art standards include

SPI's

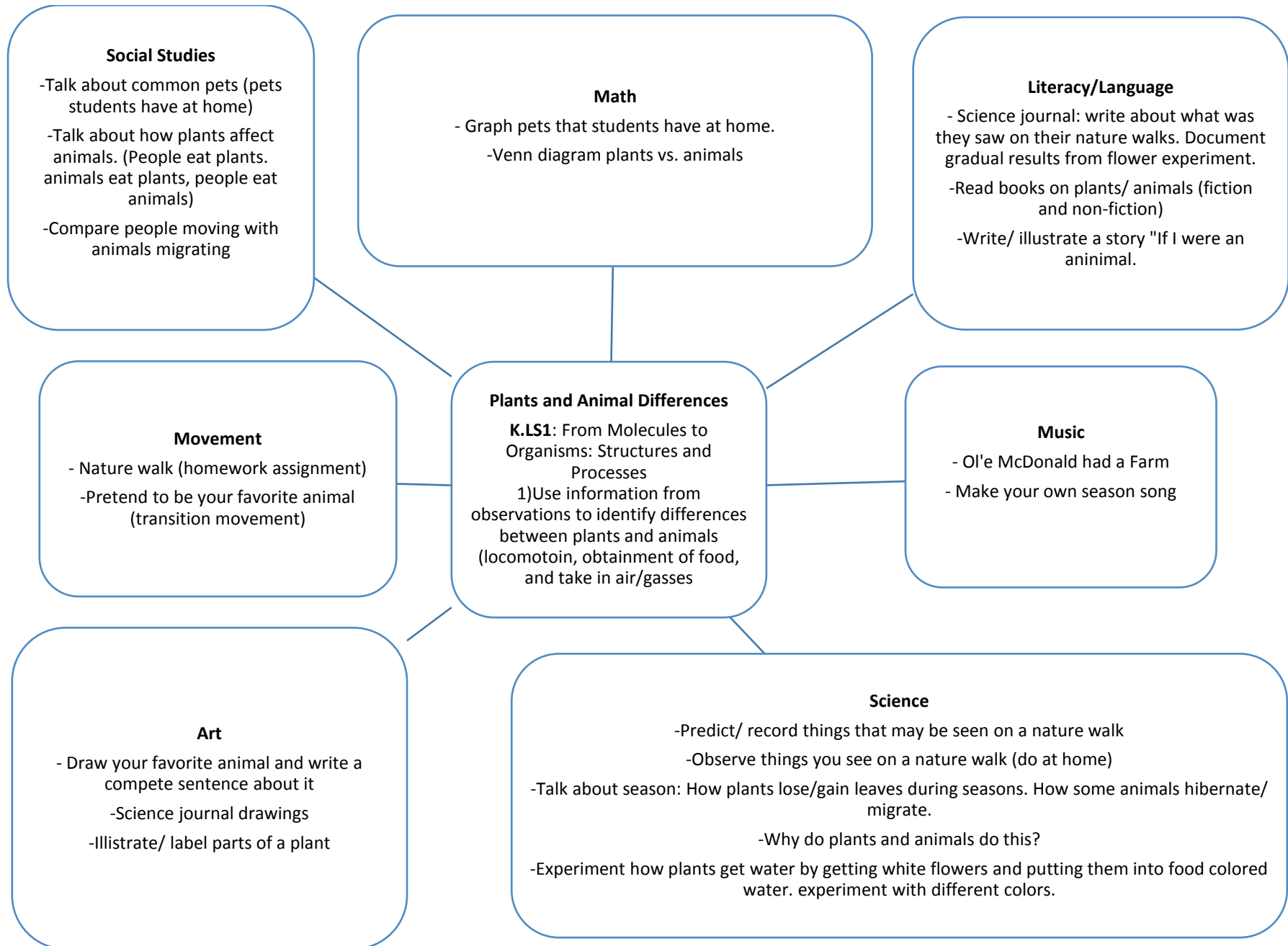
3.2.1 Recognize subject matter and symbols in the student's own art.

3.2.2 Identify subject matter, symbols, and ideas in the student's own art.

3.2.3 Explain subject matter, symbols, and ideas in the student's own art.

Goals. The goals of this unit are for children to be able to identify differences between plants and animals specifically locomotion, obtainment of food, and how they take in air/gasses. Other goals of this unit include writing sentences using accurate capitalization and punctuation and mostly accurate spelling. Students will also be able to distinguish between wants and needs of people and animals.

A Curriculum Web (c)



Title and Description of Learning Experiences (d)

Overview

Calendar

Week 1 of 2

Schedule	Monday	Tuesday	Wednesday	Thursday	Friday
Free Play/Center/ Arrival			Act out your favorite animal		
Welcome/Whole Group books	Discuss plants and animals KWL chart about plants and animals	Graph pets students have (discussed the day before)	List animal characteristics	Discuss what animals eat. Do we eat some of the same foods animals eat? Do we eat animals?	Read <i>Animals Homes</i> Discuss how some animals <u>migrate</u> and some animals <u>hibernate</u> with the changing of seasons
Small Group	Discuss animals students have at home	Predict and record things that might be seen on a nature walk	Write/illustrate a story "If I were an animal"		Do plants and animals change with the seasons?
Transition		Pretend to be your favorite animal		Sing Ole McDonald as they transition	
Snack	Animal crackers		Gummy bears		Teddy grahams
Free Play/Center Time	Play-doh (See what they make with it)		Play-doh-create an animal/ describe characteristic of the animal		
Outdoor Learning/Gross Motor	Point out different plants				What season is it right now? Are there animals and plants?
Small Group		Read <i>Animal Tracks</i> Discuss why animals travel	Talk about what animals eat.	Do people and animals share similarities? How so?	
Free Play/Outside Departure				Students go on nature walk/ask parents to do nature walk with students and document 3 things seen in science journal	

* Complete lesson plan

Schedule	Monday	Tuesday	Wednesday	Thursday	Friday
Free Play/Center/Arrival					
Welcome/Whole Group books	Discuss the effect the seasons have on plants and animals Read <i>What makes a Plant</i>	Watch time-lapse video of plants changing throughout the seasons	Discuss what/how plants eat. Start experiment with flower/water color water	Can plants move? Discuss pollination/ read story on pollination	Complete KWL chart Recap on differences between plants and animals
Small Group		Discuss do plants eat? How?	Make predictions in science journal about what will happen in the experiment	Document flower experiment	Document final flower experiment results/ discuss results
Transition					
Snack	Carrots		Celery/ veggies		
Free Play/Center Time	Grouping plants and animals	Play-doh plants- label the parts		Make a garden/ drawing	
Outdoor Learning/Gross Motor		Count different types of plants			
Small Group			Discuss what was seen on nature walk/ compare predictions	Read <i>Curious George plants a seed</i>	
Free Play/Center/Departure					

* Complete lesson plan

Titles and Descriptions

Week 1

Day 1

Discussion about what plants and animals are will begin. Students will fill out a KWL chart to help the teacher understand what prior knowledge the students may have. This activity will be finished at the end of the semester. The teacher will facilitate inquiry by asking questions based on student knowledge such as “Can plants move?” or “How do animals help us?” Students will relate the lesson to their personal lives by talk about animals they have at home. This will continue to tomorrow. During center time play-doh will be set out for the students to use. The teacher will allow them to make whatever they want with it to see if they begin to make things such as animals or plants.

Day 2

The teacher will pick up the discussion from yesterday about pets that students have at home. The teacher will graph the types of pets that students have at home. The students will help the teacher graph by telling her where she should put the marks on the graph. **(K.FL.VA.7b** With guidance and support from adults, explore word relationships and nuances in word meanings. i. **Sort common objects into categories to gain a sense of the concepts the categories represent.** ii. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites. iii. Make real-life connections between words and their use. iv. Distinguish shades of meaning among verbs describing the same general action.) The teacher will ask students what it would be like to go on a nature walk. The teacher will ask them to write/draw their predictions of what they might see if they took a nature walk in their science

journals. **(K.FFL.WC.4** Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a. Write uppercase and lowercase manuscript letters from memory. b. Write a letter/letters for most consonant and short vowel sounds (phonemes). c. Represent phonemes first to last in simple words using letters (graphemes) such as rop for rope. d. Spell VC (at, in) and CVC (pet, mud) words with short vowels; spell V (a, I) and CV (be, go) words with long vowels. e. Identify the letters used to represent vowel phonemes and those used to represent consonants; know that every syllable has a vowel. f. Write some common, frequently used words (am, and, like, the). g. Print many upper and lowercase letters.) The teacher will read *Animal Tracks* to the students if there is time.

Day 3

The class will make a list of animal characteristics (fur, claws, four legs, etc.). After the list is complete the students will write a story with the story prompt “If I were an animal I would be a...” The students will be encouraged to use the descriptive words that were written on the list. **(K.FFL.WC.4** Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a. Write uppercase and lowercase manuscript letters from memory. b. Write a letter/letters for most consonant and short vowel sounds (phonemes). c. Represent phonemes first to last in simple words using letters (graphemes) such as rop for rope. d. Spell VC (at, in) and CVC (pet, mud) words with short vowels; spell V (a, I) and CV (be, go) words with long vowels. e. Identify the letters used to represent vowel phonemes and those used to represent consonants; know that every syllable has a vowel. f. Write some common, frequently used words (am, and, like, the). g. Print many upper and lowercase letters.) The list will stay posted for the students to refer to. After they finish writing the story the students will illustrate their story. **(SPI 3.2.2** Identify subject matter, symbols, and ideas in the student’s own art.) Play-doh will be set

out again during center time. This time the objective will be for students to create an animal, and write a sentence or two describing the animal they created. (K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts.) Later in small groups the teacher will ask the students to discuss what animals eat and observe what they say.

Day 4

The teacher will continue the discussion of what animals eat. The teacher will present the question “do we eat what animals eat?” and “do we eat animals?” The teacher will facilitate discussion through these questions. The teacher will assign the students the nature walk “homework”. Parents and students will take a nature walk at home and write/illustrate three things they see on the nature walk. The items may be plants or animals.

Day 5

The teacher will read *Animal Homes*. After reading the teacher will introduce the new vocabulary terms *habitat*, *hibernate*, and *migrate* to the students. The teacher will ask the students to tell her what they think these terms mean, and then explain to them correct meanings. The teacher will ask if students think the changing of seasons has anything to do with these terms. The teacher will discuss what the season is at the moment and will question about what kind of plants and animals are seen during this season. (K.24 Use correct words and phrases related to chronology and time (now, long ago, before, after; morning, afternoon, night; today, tomorrow, yesterday, last or next week, month, year; and present, past, and future tenses of verbs).

Week 2

Day 6

Class will begin with the teacher reading *What Makes a Plant*. Then the class will discuss plants and how they eat, move, and breathe. The teacher will ask students if they have any ideas about how a plant may do those things, and then ask if the season has anything to do with it.

During small groups the teacher will have small bags (one for each group) that have assorted plastic animals/plants/ misc. items, the students are to make three groups (plant, animal, other), and put the correct item in each group. (**K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.**)

K.MD.C.4 Sort a collection of objects into a given category, with 10 or less in each category. Compare the categories by group size.) The students will count and tell how many are in each group.

Day 7

The students will watch a time-lapse video of plants changing throughout different seasons. This will allow students to see how season effect plants in a way that is easy for them to understand. The teacher will ask students to brainstorm ways they think plants eat and what it is that they eat. In centers the teacher will leave Play-doh out and have students create and label the parts of their own plants. (3.2.3 **Explain subject matter, symbols, and ideas in the student's own art. K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts.**) During outside time the teacher will ask the students to try to count as many different types of trees as they can. (**K.CC.A.1 Count to 100 by ones, fives, and tens. Count backward from 10.**)

Day 8

The teacher will continue the discussion from small groups about what/how plants eat. The teacher will then present materials for a flower experiment. Before telling the students what she is going to do she will ask them to make predictions about what they think she will use the materials for. This will promote inquiry in the experiment. After hearing all the predictions, the teacher will explain how the experiment works, and proceed to put one flower in each color container of water. The teacher will have the students write in their science journals what they think will happen next. (K.28 Use a combination of drawing, dictating, and writing to narrate a single event or several related events. K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts. K.FFL.WC.4 Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a. Write uppercase and lowercase manuscript letters from memory. b. Write a letter/letters for most consonant and short vowel sounds (phonemes). c. Represent phonemes first to last in simple words using letters (graphemes) such as rop for rope. d. Spell VC (at, in) and CVC (pet, mud) words with short vowels; spell V (a, I) and CV (be, go) words with long vowels. e. Identify the letters used to represent vowel phonemes and those used to represent consonants; know that every syllable has a vowel. f. Write some common, frequently used words (am, and, like, the). g. Print many upper and lowercase letters.) Later in the day before leaving the students will share things they saw on the nature walks they took at home.

Day 9

The teacher will present the question “Can plants move? How do they move?”. The class will hold a discussion about how plants move. The teacher will read the book *Animal Pollinators* and will introduce the vocabulary term pollination. In small groups the teacher will have the students take turns going to look at the flower experiment. The students will document any

changes that have occurred over night. (K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts. K.28 Use a combination of drawing, dictating, and writing to narrate a single event or several related events) Students will have the option to draw their own garden in small group. The teacher will have seed packets of a variety of plants for students to examine and use as a tool for their drawing. (3.2.3 Explain subject matter, symbols, and ideas in the student's own art.) Students will also have the option to read *Curious George Plants a Seed*.

Day 10

The class will complete the KWL chart from the beginning of the unit. (K.24 Use correct words and phrases related to chronology and time (now, long ago, before, after; morning, afternoon, night; today, tomorrow, yesterday, last or next week, month, year; and present, past, and future tenses of verbs).) They will discuss all the new vocabulary terms they have learned. The class will also make a final Venn diagram of the likes and differences of plants and animals. The students will be encouraged to use the new vocabulary terms. (K.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts.) Students will finish filling out the science journals on the lower experiment. The class will discuss the final results of the experiment, and why they think that result happened.

Two Complete Lesson Plans (e)

Complete Lesson Plan #1: Playdoh Plants

Complete Lesson Plan #2: Color Changing Flowers

Unit Evaluation Plan (f)

Formative

Throughout this unit many forms of formative and summative assessments will be done.

Formative assessments that will be done include group discussions, questioning, journaling, thumbs up/down/sideways, and a KWL chart as a form of self-assessment. These assessments will be differentiated based upon student abilities. Struggling students will be given more time to answer questions and will be provided materials to draw/write their responses instead of verbally saying them. For journaling students may have an aid or one-on-one teacher assistance to help them draw/write their thoughts.

Summative

Summative assessments will include writing samples, checklists, and running records. These assessments will allow the teacher to see what students may need extra practice on. To differentiate these assessments the teacher may allow the students more time to complete an assignment. The teacher may also have a one-on-one meeting with the child to provide extra support needed.

A Letter to Parents (g)

Dear Parents,

Over the next two weeks, we will be learning to identify differences between plants and animals. Some of the main differences we will be focusing on are movement, how and what they eat, and how they breathe. This will be a fun and exciting unit for our students. One of the activities we will be doing for this unit is “How do Flowers eat?” This experiment will show our students that plants drink water through roots. This activity will take place over several days. Please feel free to contact me if you have any suggestions or ideas for more experiments that can be performed!

As a form of assessment, I will be asking the students to take a nature walk at home and draw three things they see on the walk. Please feel free to take some time to walk outside with your child. Allow them to point out things they notice that may be a plant or an animal. This will not take long but will give you chance to observe some of the information your student has been learning in class. Thank you for your help and support! If there are any questions or concerns please feel free to contact me by phone, email, or on our classroom blog.

Sincerely, Your Teacher

Contact Info: 423-434-2434, school email: morrellp@yourschool.net

List of References (h)

Teachers

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List of Resources Used in the Unit (i)

Materials and supplies

- Pencils
- Paper
- Crayons
- Play-doh
- Flowers
- Food coloring
- Jars (clear containers)
- Water
- Markers
- Science Journals

Print and non-print

- Books
 - *Animal Houses*
 - *Animal Tracks*
 - *What Makes a Plant*
 - *Curious George Plants a Seed*
- Large chart paper
- Pictures of plants and animals

Technology resources

- Video- Time lapse

Other