

Unit Plan-Integrated Learning Segment

Key Assessment

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Focal Science Standard: TN Academic Standards (Kindergarten)- Earth and Space Sciences (Earth and Human Activity): **K.ESS3:** Use a model to represent the relationship between the basic needs (shelter, food, water) of different plant and animals (including humans) and the places they live.

Theme/Topic: Animals and how they build their shelters to protect themselves from different predators and the outside elements.



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Introduction and Rationale (a)

TN State Standard: **K.ESS3: Earth and Human Activity** 1.) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.

Background

This 2-week Unit Plan supports students' thinking and learning related to earth and space sciences and the effects that humans and animals have on the planet. Throughout the unit we will be exploring the concept and idea of animals and how they use shelter to protect them from predators and the outside elements. The Unit Plan also integrates all the subject other than just science. I will be implementing many hands-on and mind-on STEM activities that will allow opportunity for inquiry. "Inquiry is at once a practical and an intellectual activity. In young children, inquiry frequently focuses on tangible items that are of immediate interest" (National Science Foundation, 2000, p.10). As we wrap up the unit, the student will be designing and constructing their own bird's nest out of different natural materials. This is only one example of many inquiry activities that the students will take part in during the unit. Since this is an integrated Unit Plan, we will cover the idea of animals and their shelter throughout all the subject areas. For example, in math the students will measure the length and weight of different eggs to represent real eggs for our birds' nest. The students will record their data and use it when designing their birds' nest. This information will help them decide how wide they need to make the nest and how strong the nest needs to be. This will meet standard K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object (Tennessee State Board of Education, 2016). This Unit Plan was carefully created with the thought of developmentally appropriate practices in mind. All activities and

lesson are in alignment with current thinking in science and with regards to the 5Es as described below.

Rationale: Diverse Learning Needs and Relevance to Specific Students

The activities in this Unit Plan provide opportunity for accommodation and modification. This is evident through accommodating to the needs of children who need more support and to the children who need more of a challenge. For example, I will have the students work in groups when completing their birds' nest (Day 9, Elaborate Phase). This will allow students the opportunity to use peer support if needed. This Unit Plan will be expanding children's knowledge of animals and how they use shelter to protect themselves from predators and the elements. This unit is appropriate for kindergarten because it is in alignment with the state standard K.ESS 3: Earth and Human Activity. 1.) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live (Tennessee State Board of Education, 2016). I also know this unit is developmentally appropriate because during my observation at the University School the Kindergarteners had a wealth of knowledge regarding needs vs. wants. In this unit, I have planned activities and lessons that are developmentally appropriate to the grade, age, and ability level of each child.

Science, Inquiry, Constructivism, & Practices

My 2-week unit will focus on animals and how their specific form of shelter protects them from predators and the surrounding elements. Children will explore and evaluate the different types of shelters and how each one is unique in keeping that animal safe. Throughout the entirety of the lesson, the students will be using an inquiry-based type of learning. This

means the teacher will provide materials and facilitation, yet the students will explore and elaborate using their own personal ideas. For example, during the elaborate phase, when the students design and construct their own birds' nest, I will give students the materials and questions to explore. *Construct a bird's nest using your data from the math activity and your new learned knowledge of how birds build their nest to protect their eggs and themselves.* I will ask these questions to guide students thinking. From there the students will decide how to construct their birds' nest. They will design the structure of the nest and what materials they feel would keep the bird the warmest and safest.

This Unit Plan brings forth ideas of constructivism through the theory of John Dewey. Dewey believed students learn by *doing* and should be allowed to construct, create, and actively inquire (Learning Theory- Constructivism, 2012). In this unit students will have the opportunity to take part in all these aspects at one point or another. For example, students will design and create their own shelter for a designated animal. They will also construct their own birds' nest. Students will have many opportunities to learn by doing throughout the entirety of the unit.

5Es Framework (Examples)

Throughout the Unit Plan, we will be following the 5Es learning cycle (Bybee, 2014). Each of the activities in the unit will align with one of the 5Es (engage, explore, explain, elaborate, and evaluate). Each one of the 5Es transition from hands-on to minds-on each day. At the beginning of week one, for our **Engage** activity, the students will play The Camouflage Game. The teacher will hide different objects around the room and have the students find the objects without telling them about their camouflage attributes. For day 2, students will take part in the **Explore** activities, we will take a nature to explore different animal shelters we see around the school. We will also be exploring and research different animals and how they build their

houses based off of the environment they live in (Social Studies). Day 3 will be our **Explain** day. For this day, we will read the story, *What Do Living Things Need?* and discuss what basic needs animals need in order to survive. I will also show students a variety of pictures and videos of different animal shelters and how it protects them. Day 4 is the **Elaborate** phase. On this day, students will be given a specific animal and they will then design and create a shelter for that animal. On day 5, **Evaluate**, the students will reflect on their experience when creating the animal shelter in a science journal. Week two starts the 5Es process all over again. This is because starting week two we will be focusing mainly on birds and how they build their nests to protect them from predators and the outside elements. Day 6 will be **Engage**, students will have the opportunity to explore a sensory table that is all things birds. This table will have feathers, pictures, materials they build their nest with, and different sized eggs. Day 7, **Explore**, I will have students explore the different materials they will use when constructing their birds' nest. I will also have the students explore a variety of eggs that will be used in the bird's nest. They will have the opportunity to their different attributes, weights, and lengths. Day 8, **Explain**, for this day we will read the book, *Robyn Boid: Architect* to explain specifically how birds build their nests. Day 9 will be the next **Elaborate** day. This will actually cover all of day 9 and then part of day 10. That is because our final activity will be 2 parts. In Part 1 students will design their own bird's nest, and in part 2, the students will actually construct their own bird's nest using the materials they explored earlier in the week and data they retrieved from a math lesson. Day 10, **Evaluate**, students will reflect, in their science journal, on their experience designing and constructing their birds' nest.

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

Standard addressed.

The primary standard for my Unit Plan is for Kindergarten. The standard comes from the TN Academic State Standard, K. ESS3: Earth and Human Activity 1.) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live (p. 20; Tennessee State Board of Education, 2016). The big idea in science related to my standard is that “Earth’s surface processes affect and are affected by human activities. Humans depend on all of the planet’s systems for a variety of resources, some of which are renewable or replaceable and some of which are not.” (NRC, 2012, p. 190-191). We need to learn about human activities and how they affect the earth, so we can learn how to better protect and preserve it for generations to come. We need to also understand how humans depend on the planet’s systems so we can effectively use the variety of resources earth has to offer.

Connections to higher grade standards.

My standard was more difficult, than expected, to connect because the ideas really grow and become more complex over the years. My standard is K.ESS3.1, “Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.” A 4th grade standard that builds on mine is, 4.ESS3.2, “Create an argument, using evidence from research, that human activity (farming, mining, building) can affect the land and ocean in positive and/or negative ways.” One way in which the 4th grade standard builds on the kindergarten standard is the idea of human activity and how it affects the earth. The kindergarten standard requires the student to know the basic needs

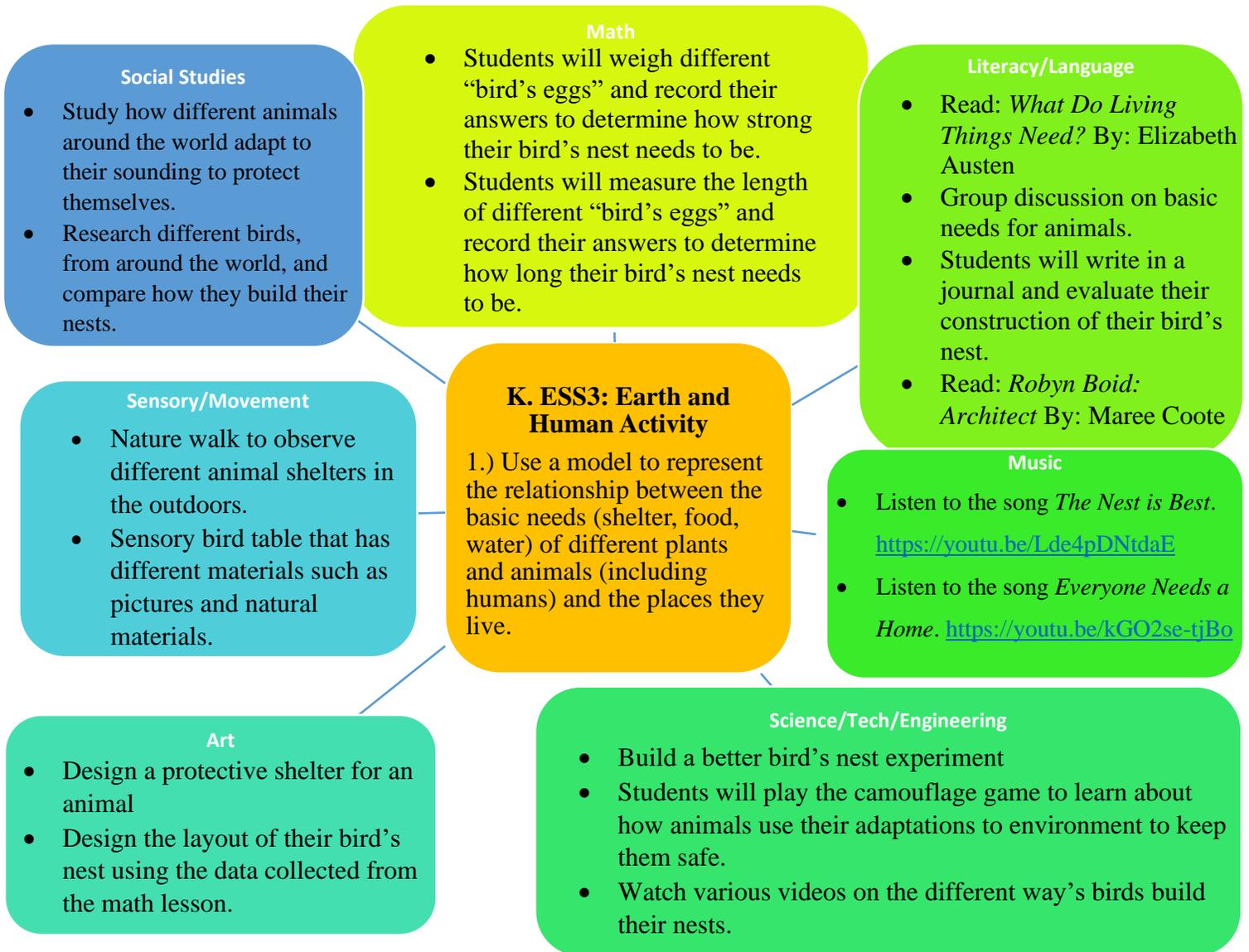
of plants, animals, and human and the places they live, but not yet the idea of how those needs affect the earth. In 4th grade the ideas and concepts become more complex. By learning in kindergarten, the basic needs, you can better understand, in 4th grade, how those needs positively or negatively affect the land and ocean. The idea of basic needs and habitats is very narrow and concrete, whereas in the 4th grade the idea is much broader, and the student begins to think about how human activity positively or negatively affects the land and ocean.

Goals and Objectives.

By the end of the two-week Unit Plan the students will be able to,

- Represent the relationship between one of the basic needs (shelter) of different animals and the places they live through group discussions and activities.
- Recognize the different shelter constructions of various animals through group discussions and hands-on experiments.
- Recognize how animals adapt to their environment to protect themselves through a group activity.

A Curriculum Web (c)



Title and Description of Learning Experiences (d)

Overview.

In this set of learning experiences, children will explore the topic of basic needs animals rely on in order to survive. In this unit, we will be focusing mainly on the basic need of shelter. Throughout the week, we will be following the 5Es framework (Bybee, 2014). For each day of the week, we will be alternating between minds-on and hands-on activities. For week one, we will be focusing on the topic of shelter and how animals use their homes to protect themselves, and their young, from different predators and the outside elements. On day one, students will become **engaged** in the topic by playing The Camouflage Game. During day two, students will have the opportunity to **explore** different animal shelters during a class nature walk around the school. On day three, I will begin to **explain** the topic by reading books and presenting pictures to the class. Students will design their own shelter for their chosen animal on day four to **elaborate** on their knowledge. On the final day, students will **evaluate** their own work by writing in a science journal. Starting week two, we will be focusing mainly on birds and how they build their nests. On day 6, students will become **engaged** in the lesson by having the opportunity to explore a sensory bird table. During day 7, students will **explore** various materials they will use when constructing their own birds' nest later in the week. On day 8, I will **explain** to the student's what factors birds take into consideration when creating their nests by reading a book and showing pictures and watching a video. On day 9, students will design their own birds nest using various natural materials to **elaborate** on the topic of shelter. On the final day, students will **evaluate** their own work on they construction process. Below is a two-week schedule of major activities as well as descriptions of each.

Two-week Unit Plan Calendar

Week 1 of 2

Time of Day	Monday	Tuesday	Wednesday	Thursday	Friday
Sign-in/Arrival				Listen to the song <i>Everyone Needs a Home</i> as students arrive. https://youtu.be/kGO2se-tjBo	
Welcome/Circle time			Read: <i>What Do Living Things Need?</i> Discuss what basic needs animals need in order to survive (Explain).		
Small Group			Show pictures/videos of different animal shelters and how it protects them (Explain).		
Social Studies		Study how different animals around the world adapt to their sounding to protect themselves (Explore)			
Science	Play the Camouflage game to introduce students to the topic of how animals protect				

	themselves (Engage).				
Outdoor/ Movement		Nature walk to observe different animal shelters in the outdoors (Explore).			
Small group/Art				Design a protective shelter for an animal (Elaborate).	Students will reflect on their experience designing their animal shelter through a journal entry (Evaluate).

Week 2 of 2

Time of Day	Monday	Tuesday	Wednesday	Thursday	Friday
Sign-in/Arrival					
Welcome/Circle time			Read the book <i>Robyn Boid: Architect</i> Discuss how bird's build their nest (Explain).		
Math		Math activity where students find the lengths and weights of			

		different bird eggs (Explore).			
Music/Movement	Listen to the song <i>The Nest is Best</i> as students arrive. https://youtu.be/Lde4pDNtdaE				
Science		Students will explore materials they will use when creating their own nests. (Explore)		Build a better bird's nest experiment Part 1 (Elaborate).	Build a better bird's nest experiment Part 2 (Elaborate).
Social Studies			Research different birds, from around the world, and compare how they build their nests (Explain).		
Small group	I will have a bird sensory table that will have a variety of materials such as pictures and natural materials (Engage).	Students will take part in an activity where they decide which objects best protect a bird's egg. Demonstrates why nests need to be made just right. (Explore)			Reflect, through a writing activity, on the design and construction of the bird's nest (Evaluate).

Title and Description of Activities

TN State Standard**K.ESS3: Earth and Human Activity**

1.) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.

Week 1 of 2

- Day 1:

The Camouflage Game: (Adapted from source: Pinterest). As a group, the students will play the camouflage game. I will hide objects around the room and have them try to find them. This will show students how camouflage works and how some animals camouflage their homes to keep them safe. **(Engage)**

- Day 2:

The Nature Walk: I will take the students outside on a nature walk so we can observe the different animal shelters we see around the school and investigate how the shelter protects that animal. We will try to find bird's nests or ant hills. I will remind the students to look and not touch. **(Explore)**

- Day 3:

What Do Living Things Need? Part 1: As a group we will read the story *What Do Living Things Need?* By: Elizabeth Austin. During our circle time and we will begin to discuss the specific area of content, shelter and why animals need a home to keep them safe. **(Explain)**

What Do Living Things Need? Part 2: For the second part, I will show the students picture of different shelters for animals and the specific things that protect them. For example, I will show them a picture of a clown fish and explain that it lives in a sea anemie because it keeps them safe or explain that birds put their nests high in trees because it protects them from predators. **(Explain)**

- Day 4:

Design A Home: I will have students design their own protective shelter for different animals. I will have the students choose an animal and then they will design and draw a shelter based off of the animal's needs. For example, if a student chooses a bear they can draw a cave because bears tend to live in caves. **(Elaborate)**

- Day 5:

Reflection Time: Students will reflect on their experience creating and designing a home for their animal. In their writing journals, they will answer questions such as, *How would you design your shelter differently next time?*, *Why do animals need a home to live in? What is another basic need an animal needs to survive?* Through this questioning, I will be able to see if the students are beginning to master the content. **(Evaluate)**

Week 2 of 2

- Day 6:

All Things Birds Sensory Table: (Adapted from source: Pinterest). To start week 2 off, I will have an all things birds sensory table set up for the students to explore different aspects of birds. This week we will be focusing mainly on birds and how they build their nests to protect themselves, and their young, from predators and the outside elements. At the table, I will have pictures of different birds, nests, and eggs. I will also have books about how birds build their nests as well. I will have different materials set up that birds use to build their nests with. I will also have magnifying glasses at the table so students can carefully observe the materials. **(Engage)**

- Day 7:

Exploring Materials: Students will have the opportunity to explore various materials they will have a chance to choose from while creating their bird's nest later in the week. **(Explore)**

Bird Eggs and Their Characteristics: For a math lesson, I will have the students measure the length of different eggs, so they can begin to plan the

length of their bird's nest. I will also fill the eggs with different materials to add some weight to them. They can weigh their eggs, so they know how strong they need to make their nests. They will also record their data so they can use it when designing and constructing their birds' nest. (**Explore**)

Why Do Bird's Nests Need to Be Made Just Right?: I will have a whole group activity where we will test out different objects to see which one best protects the egg. The object cannot be too big or too small and it needs to be able to hold the weight of the egg as well. Ex: Have a styrofoam cup and a large bowl. Let the students explore the different objects and see how the egg is too small for the bowl and will roll around and be in harm's way, whereas the styrofoam cup keeps the egg safe and secure. I will also provide a variety of natural materials as well. (**Explore**)

- Day 8:

Robyn Boid; Architect: (Adapted from: Ritz & Straits, 2019). We will read the story Robyn Boid: Architect. By: Maree Coote. After we will discuss the specific shelter of a bird and how they build it protect their eggs and themselves. We will also look at different pictures and videos of birds and their nests. (**Explain**)

Build a Better Bird's Nest Part 1: (Adapted from: Ritz & Straits, 2019). The students will draw a blueprint of how they want their bird's nest to look and what materials they want to use. They will take into consideration the data they retrieved from their math lesson. I will then have them explain why they chose that type of build and the materials they chose. (**Elaborate**)

- Day 9:

Build a Better Bird's Nest Part 2: (Adapted from: Ritz & Straits, 2019). I will now have the students engineer their own bird's nest using the materials and blueprints they created the day before. We will then discuss who had the most effective and safe bird's nest and explain why they do. I will listen to key words

they have learned throughout the unit during the discussion so I can evaluate their learning. (**Elaborate**)

- Day 10:

Personal Reflection and Discussion: After everyone has completed their birds' nests, we will have a group discussion on our designs and finished products. The students will share their models and in their writing journals, students will assess their own learning. They will answer questions such as, *What changes would you make to your final design?, Do you feel that you learned what animals' need in terms of shelter?, Do you understand how to make and use a model?, and Do you feel that you tried your best in this unit?* By asking these questions I will be able to assess the students learning and mastery of the content. (**Evaluate**)

Lesson Plan #1

Lesson Title: Bird Eggs and Their

Grade/Level: Kindergarten

Date/Learning Experience #:

Characteristics

Curriculum Standards	Essential Question(s)/I Can Statement(s)
<p><i>State Curriculum Standards – Underline your <u>language/vocabulary words</u></i></p> <p>K.ESS3: Earth and Human Activity</p> <p>1.) Use a <u>model</u> to <u>represent</u> the relationship between the <u>basic needs</u> (shelter, food, water) of different plants and animals (including humans) and the places they live.</p> <p>K.MD.A.1 <u>Describe measurable attributes</u> of objects, such as <u>length</u> or <u>weight</u>. Describe several measurable attributes of a single object.</p>	<p><i>What question(s) or I Can statement(s) drive your instruction?</i></p> <p>EQ: What factors do bird’s take into consideration when building their nest?</p> <p><u>I can accurately measure the length of different bird’s eggs.</u></p> <p><u>I can accurately measure the weight of different bird’s eggs.</u></p> <p><u>I can accurately record my retrieved data.</u></p>
<p>Lesson Objective(s) – Student Learning Outcome(s) for this learning experience</p>	
<p><i>Objectives use active verbs, are measurable (if applicable), and link to standards. Consider using Bloom’s Taxonomy or Webb’s Depth of Knowledge.</i></p> <p>TLW describe measurable attributes, such as length and weight, of different bird eggs through a group activity</p> <p>TLW demonstrate appropriate use of measuring tools via a group measurement activity.</p>	
<p>Knowing Your Learners</p>	
<p><i>Describe pre-requisite skills students already know that will help them meet the lesson objective(s). What is your evidence that students need this/these skills(s)? This may include pre-assessment data; student personal, cultural or community assets you have gathered and observations you have made concerning your students.</i></p> <p>I know students are ready for this lesson because they have been actively involved in various lessons throughout our two-week unit on animals and how they build their shelters protect themselves, and their young, from predators and the outside elements. This activity will take place on day 6 of our two-week unit. During the start of week two students will be focusing more on bird’s, specifically, and how their build their</p>	

neys. The students are ready for this activity because they have taken part in rich discussions on how bird’s strategically build their nests to protect themselves and their young.

Assessment/Evaluation

How will students demonstrate understanding of lesson objective(s)?

TLW demonstrate understanding of the lesson by correctly filling in the recording sheet at 95% accuracy. They will also demonstrate accuracy of the lesson by using the correct terminology during the group discussion and activity.

Formative: *How will you monitor student progress towards lesson objectives as you are teaching?*

I will use an informal assessment to determine the student’s understanding of bird eggs and how they differ in size, length, and texture and how birds use the size of their eggs to build their nest. Throughout the lesson I will be observing and using anecdotal notes during the group activity. I will go around and listen for students to use the correct terminology such as *weight* and *length*. I will also be asking questions to deepen the student’s thinking and asking them to defend their answers. On my anecdotal sheet I will take note of students who are using the new terms correctly and those who may need some more instruction.

Summative: *What evidence (formative and/or summative) will you collect and how will you document student learning/ mastery of lesson objective(s)? A summative assessment is not needed for every lesson, however, it is required for every lesson submitted for CAEP data collection points I, II, and III.*

TTW gauge student mastery of the aligned standards and objectives by observing/grading the students recording sheets they complete during the group activity. If the student correctly weighs, measures, and records 95% of the eggs, they will have mastered the content. If they correctly weigh, measure, and record 80% of the eggs, they will be considered emerging. If the student only weighs, measures, and records 70% of the eggs, they will be considered non-mastery and will be given further instruction.

Assessment/Evaluation
Modifications

What modifications will you make on assessments/ evaluations for students with diverse and/ or special needs (i.e. students with IEP or 504, struggling learners, advanced learners) and will these modifications be within/ for small groups or individuals?

All IEP/504 plans will be met during the lesson. For my one student that gets distracted easily, I will provide them with a job during the lesson to keep them focused on the lesson. For my non-mastery students, I will have an individual meeting with them and provide them with more instruction.

I will make a copy of their recording sheets and I will place one of the sheets in their portfolio and I will send one home so the parents can observe what we have been doing.

Academic Feedback: *How will you give academic feedback? How will your academic feedback promote student understanding of the learning objective(s) or state standard(s)?*

Throughout the entirety of the lesson, I will be providing the students with positive academic feedback. During the group discussion, when I am giving students examples of different bird eggs, I will give feedback such as, “*I agree with your answer, but why do you think the ostrich egg is larger than the robin egg?*” By providing this feedback, it will allow the student to think more deeply about the reason behind their answer. Another example could be, “*I appreciate how hard you worked on making sure your measurements are precise.*” The feedback gives credit to the child for paying attention to detail when retrieving their birds nest data.

Academic Language Demands

Function and Product of the Lesson *The function is the verb, usually a Blooms verb (e.g., analyze, interpret, recount), that guides the language objective of the lesson. This includes a product that students will either write, say, present, or do that involves Academic Language (e.g., essay, present, recount).*

TLW describe and identify the different weights and lengths of various bird eggs.

TLW accurately write their retrieved data on a recording sheet.

Academic Vocabulary *What specialized terms and phrases do students need to understand what they are expected to do? How does this vocabulary connect to the objectives, state standards and function of the language demand?*

Model (New)- A three-dimensional representation of a person or thing or of a proposed structure, typically on a smaller scale.

Represent (New)- To present again or anew.

Describe (Review)- give an account in words of (someone or something), including all the relevant characteristics, qualities, or events.

The students will need to understand these vocabulary terms in order to effectively meet the lesson objectives and standards. They need to understand the terms *model* and *represent* in order to begin to master the unit standard. Students will need to understand the meaning of the word *describe* so they can effectively participate in the group activity.

Content Vocabulary *What are the key vocabulary words, symbols, or sounds in this lesson? How does this vocabulary connect to the objectives, state standards and function of the language demand?*

Basic Needs (Review)- A minimal list of elements that human beings necessitate, in order to fulfill basic requirements and achieve a decent life.

Shelter (Review)- A place giving temporary protection from bad weather or danger.

Length (New)- The term used to identify the size of an object or distance from one point to another.

Weight (New)- A body's relative mass or the quantity of matter contained by it, giving rise to a downward force; the heaviness of a person or thing.

Measurable attributes (New)- characteristics of a two-dimensional object or three-dimensional object that can be measured. It may include length, weight, mass, volume, capacity, or area.

Students will need an understanding of these vocabulary terms in order to meet the aligned state standards and objectives. They will need to understand the words *basic needs* and *shelter* in order to master the unit standard. The students will have an understanding of the math terms so they can effectively master the lesson activity.

Syntax and/or Discourse, Mathematical Precision (math only)- **This section is not required for Early Childhood or Special Education.**

Syntax *What are the specific ways or conventions for organizing symbols (e.g., linear, horizontal), words (grammar), phrases, or graphics that students need to know to be able to do what you are asking?*

Discourse *What are the specific ways in which members of a discipline (e.g., scientist, historian, etc.) talk, write, and communicate knowledge that students need to know to be able to do what you are asking (e.g., essays, presentations, performance, journal, debate, historical account, signal)?*

Language Supports *What general instruction will you provide to help students in the whole class (e.g., word walls, learning partners, guided notes) learn the discourse/syntax? What focused instruction (e.g., Venn diagrams, graphic organizers, outlines, student examples, sentence stems) will you provide to help students learn the discourse/syntax? (can be completed in small groups)? What individual instruction that targets the needs of an individual student(s) will you provide to help that student(s) learn the discourse/syntax? What opportunities will you provide for students to practice language/vocabulary and develop fluency? What tools (e.g., EQ or vocabulary board, Venn diagram, anchor chart, vocabulary cards, graphic organizer, peer support, sentence stems, pictures, table, chart, thinking map, modeling, sort, song, body movements, games) will you use to help students meet the language demands?*

I will have a word wall posted that has all our previous words listed on it. For our new vocabulary terms, I will have the words posted on the Smart board. I will remind the students to refer to these

words posted on the Smart board or the word wall. During our whole group discussion, I will allow for peer support. When asked a question during the discussion and the child does not understand they can call on a peer for help.

General Supports – *Strategies used to support the whole class and may be used to support more than one demand (e.g., Venn diagram, learning partners, word wall, anchor chart, vocabulary cards, graphic organizer, sentence stems, pictures, table, chart, thinking map, modeling, sort, song, body movements, games). These strategies can cross disciplines and be used in a variety of lessons.*

For general supports I will have the students help me create an anchor chart. The chart will provide information about birds and what factors they take into consideration when build their nests. I will keep the anchor chart posted on the wall for the remainder of the unit. I will also provide many pictures of different bird’s eggs to give students a better idea of how they all differ in characteristics. Students will also have the opportunity to work with a learning partner for the group activity.

Targeted Supports – *Strategies that focus toward a specific language demand (e.g., Venn diagrams, graphic organizers, outlines, examples, sentence stems). These may be addressed during small groups. These can be general supports that are modified for specific students or groups of students.*

For targeted supports, I will use many examples during small group and individual instruction.

Throughout our small group time, I will provide an ample amount of examples so the students receive more practice to master the lesson objectives.

Individual Supports – *Supports used to target the specific needs of an individual student (e.g., ELL, student with autism, struggling reader or writer, student with significant language delays). These students may or may not have been formally identified and may or may not have an IEP or 504 plan.*

For my struggling writers I will allow my assistant to help them fill in their recording sheet or the assistant can fill in the recording sheet for them by receiving their verbal answers. I will also provide extra time at each station if needed.

Instruction – When designing your instruction, consider when you will implement formal and informal assessments/evaluations, when you will provide feedback, and when you will teach academic language. Therefore, this section should include aspects written above.

Lesson Part	Description of Activities and Instruction (Teacher Does)	Description of Activities and Instruction (Students Do)	Meeting Individual & Group Needs /Learning Styles <i>Plans instruction to meet the needs of individual students. Adaptations are tied to learning objectives. Specific individual or group learning includes requirements in IEP or 504 plans.</i>

<p>Set/Motivator: <i>Restate and address your Essential Question. How do you engage student interest in the content of the lesson? How does this relate to previous learning? Use knowledge of students' academic, social, and cultural characteristics.</i></p>	<ol style="list-style-type: none"> 1. I will begin the lesson by calling the students a table at a time. 2. When everyone has been called to the rug, I will introduce the lesson by stating the name of the lesson and going over the EQ, I can statement, lesson objective, and standard. 3. I will then go over our review, and new, vocabulary terms. 4. I will allow time for students to answer any questions they might have about the lesson. 5. As a group we will create an anchor chart that provides information on the topic of birds and how they build their nests. 	<ol style="list-style-type: none"> 1. TSW quietly come to the rug as their table is called. 2. TSW be actively involved in the discussion on the lesson standard and objectives, EQ and I can statement. 3. TSW ask any questions or concerns they might have about the vocabulary terms. 4. TSW be actively involved in the discussion during the presentation of the pictures. 5. TSW give ideas and examples to add to the class anchor chart. 6. TSW ask and questions they might 	<ol style="list-style-type: none"> 1. All IEP and 504 plans will be addressed throughout the lesson. 2. For my student that gets anxious when transitioning to the rug from their desk I will give them a handle signal notifying them when their table will be called next.
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	<p>6. I will next show the students many different pictures, on the Smartboard, of bird’s eggs.</p>	<p>have about the pictures.</p>	
<p>Instructional Procedures/Learning Tasks: <i>Provide specific step-by-step details of lesson content aligned with objectives, utilizing a variety of teaching strategies.</i></p>	<ol style="list-style-type: none"> 1. I will begin instruction by having a class discussion on the pictures we looked at previously. 2. We will observe the different sizes, colors, lengths, and textures of various bird eggs. 3. We will discuss that for birds to protect their eggs the nest must be just right. Not too wide, or the eggs will roll around, and not too narrow because the eggs will roll out. 4. During the discussion I will have my assistant begin to set up the 3 different 	<ol style="list-style-type: none"> 1. TSW participate in the group discussion, bringing forth ideas they had about the pictures of the bird eggs. 2. TSW observe the different, colors, textures, weight, and length of different bird eggs. 3. TSW be actively involved in the discussion on why birds build their nest perfectly to protect their eggs. 	<ol style="list-style-type: none"> 1. I will continue giving my hand signal, to my student who gets anxious in transition, throughout the activity. 2. For my student who has trouble with their fine motor skills I will have large tongs at the

	<p>weighing/measuring stations.</p> <p>5. I will allow time for students to ask any impending questions they might have about the discussion.</p> <p>6. I will have the students stay with their table groups to complete the activity.</p> <p>7. At one station there will be small Easter eggs, at another there will be regular sized Easter eggs, that will be filled with something to allow it to have some weight, and at the final station there will be large Easter eggs that will be filled with something to add weight as well. I will also have pictures set up with each</p>	<p>4. TSW ask any impending questions they might have in regard to the previous discussion.</p> <p>5. TSW will remain with their table group to complete the activity.</p> <p>6. TSW rotate through each station using a scale to measure the egg and rulers to find the length of the egg.</p> <p>7. TSW record their answers to document their data to use at a later date.</p> <p>8. TSW answer any questions they teacher may ask during the activity.</p> <p>9. TSW have a final discussion on their</p>	<p>stations for them to be able to use to pick the small eggs up. This will allow them to feel more involved in the activity.</p> <p>3. For my student who struggles to write I will have my assistant help them fill in their recording sheet.</p> <p>4. I will allow more time at</p>
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	<p>station of different birds that the eggs are representing.</p> <p>8. As students rotate through each station and find the length and weight of each egg, I will be going around and observing the students and asking questions such as, <i>What type of bird do you think laid an egg this size? Why do you think that bird?</i></p> <p>9. I will remind the students to refer to the anchor chart if needed, and to make sure they are filling their recording sheets in correctly.</p> <p>10. As students finish, we will come back together one final time to discuss our findings.</p>	<p>findings when every group has finished.</p>	<p>each station if needed.</p>
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<p>Questions and/or activities for higher order thinking: <i>These are open-ended and cannot be answered by yes or no. These can be asked at various points throughout the lesson and guide rather than direct student thinking.</i></p>	<ol style="list-style-type: none"> 1. <i>What type of bird do you believe laid this egg? Why do you think this?</i> 2. <i>Why do birds have to build their nest just the right shape?</i> 3. <i>What if a bird lays 3 eggs? Will they have to make the nest bigger or smaller? Why?</i> 	<p>Provide exemplar student responses here.</p> <ol style="list-style-type: none"> 1. I believe an ostrich laid this egg because it is really big, and an ostrich is the largest bird there is! 2. Birds have to build their nest just right so their eggs fit perfectly because if it is too narrow the eggs will roll out and if it is too wide the eggs will roll around and might break. 3. If a bird lays 3 eggs they will have to make their nest larger in order for all the eggs to fit perfectly. 	<ol style="list-style-type: none"> 4. The student can phone a friend if they are struggling with a question. 5. For students who need more challenge I will have them find the difference between the different eggs.
<p>Closure: <i>Makes clear connections to real-world situations and requires students to reflect on and apply their learning through verbal or written expression.</i></p>	<ol style="list-style-type: none"> 1. For our final discussion, we will talk about our findings in the activity. 	<ol style="list-style-type: none"> 1. TSW discuss their findings from the group activity. 	<ol style="list-style-type: none"> 1. I will have the new and review

	<ol style="list-style-type: none"> 2. I will allow time for students to make real world connections to the topic. 3. I will go over the EQ, I can statement, lesson object, vocab terms, and the standard. 4. I will notify the students that they will eventually use this data to design their bird’s nest! 5. I will have the students turn their recording sheets in as an exit ticket. 	<ol style="list-style-type: none"> 2. TSW brainstorm ideas about real-world connections to the lesson. 3. TSW ask any questions or concerns they might have about the lesson object, standard, EQ, vocab terms, or I can statement. 4. TSW will prepare for a future lesson by thinking of how they can build their bird’s nest with the data they retrieved. 5. TSW turn in their recording sheet as an exit ticket. 	<p>terms still posted on the Smart board so the students can point to the term I am talking about if needed.</p> <ol style="list-style-type: none"> 2. I will allow the students to think-pair-share ideas about real-world connections.
<p>Material/Resources: <i>What do you need for this lesson? Identify, within a bulleted list, the specific materials and resources that you will use. Describe how these materials and resources add value, depth, and extend students’ learning.</i></p> <ul style="list-style-type: none"> • Rulers 			

- Scales
- Large Easter eggs
- Small Easter eggs
- Regular sized Easter eggs
- Recording sheets
- Pictures of different birds and their eggs

All the materials listed will play a key role in the lesson and activity. The rulers and scales will be used for students to retrieve data to use when constructing their birds' nest. The different sized eggs will be as objects for students to measure with. The recording sheet is used for students to record their data from the group activity. The pictures of different birds' eggs will be used for students to have a visual example of what different eggs look like.

Technology: (a) Describe the technology you plan to use in your lesson, (b) How does the identified technology in your lesson improve student learning? If applicable, (c) explain how you will use this technology to support a variety of student needs within the learning environment, and (d) If you used this technology to design and implement formative and/or summative assessments, please explain. Did you use the technology to collect and/or analyze your data to inform instruction? Explain.

In this lesson I will be using a Smart board. The Smart board will be used to display the review vocabulary words. During the entirety of the lesson I will keep these vocabulary words posted so the students can refer to them as needed. This will improve my student's learning because they are able to see the vocabulary words in print and they can begin to make the connection between what the word sounds like and what the word looks like. I will also be showing various pictures on the Smartboard of different bird eggs. This will improve my students learning by allowing my more visual learners to begin to make the connection of how birds build their nest.

Co-Teaching Strategies Used: (highlight and explain all that apply): One Teach, One Observe; **One Teach, One Assist**; Station Teaching; Parallel Teaching; Supplemental Teaching; Alternative (Differentiated); Team Teaching

I will use the One Teach, One Assist strategy. The assistant will help setup the measurement activity. The assistant and I will walk around and assist students if needed during the activity. I will also be walking around and facilitating instruction as well.



Management

Management: *Explanation of processes and/or procedures, transitions from one activity to another, strategies for gaining attention, motivating students to engage in the lesson and focus on learning (e.g. work boards, posted procedures, modeling, positive feedback, redirection). If management decisions were addressed above, please bold those processes and procedures.*

I will transition the students from their tables to the carpet **one table at a time** to keep things safe and organized. I will use a **hand signal** to notify my student who gets anxious during transitions so they can prepare for when their table is called. I will use redirection during the entirety of the lesson to keep my students focused and on track. . I will have the students work in their **assigned table groups** during the activity, so they use each other for peer support. I will give positive feedback throughout the lesson and activity. I will also have the students **connect the lesson to their own life** to make the content more meaningful.

Theory/Rationale

I chose this activity because I felt that it was STEM activity. “STEM stands for science, technology, engineering, and mathematics. These domains have been clustered together because they are intimately related to one another” (Lange, Brenneaman, & Mano, 2019, p.3). For this activity students will have the opportunity to practice their science and math skills. In order to do this, I aligned a science and math state standard. The activity is more math based yet there are science practices integrated throughout. According to Lange, Brenneaman, and Mano, “High-quality mathematics teaching can also develop children’s executive function skills, which are the mental processes involved in planning, focusing attention, and switching among mental tasks” (2019, p.6). I chose to do a measuring activity because according to Van de Walle, “It is one of the most useful mathematics content strands because it is an important component in everything from occupational tasks to life skills for the mathematically literate citizen” (2014, p. 330). Students will not only learn about science concepts, in this lesson, they will also be able to practice a skill that will be useful to them for the rest of their lives. This is also an inquiry-based lesson because the students have the opportunity to explore materials and form their own ideas.

Date:

Anecdotal Notes

Lesson Objective:

Student	Mastered	Emerging	Non-mastery
1.)			
2.)			
3.)			
4.)			
5.)			
6.)			
7.)			
8.)			
9.)			
10.)			

Enrichment

Follow Up

Notes

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Name:

Recording Sheet

Instructions: Write the name of the egg you are observing. Use the scale to weigh the egg and record it in the appropriate column. Measure the length using the ruler and record in the appropriate column.

Bird Egg Type	Weight of egg	Length of egg

Lesson Plan #2

Lesson Title: Build a Better Bird’s Nest

Grade/Level: Kindergarten
Date/Learning Experience #:

Curriculum Standards	Essential Question(s)/I Can Statement(s)
<p><i>State Curriculum Standards – Underline your <u>language/vocabulary words</u></i></p> <p>K.ESS3: Earth and Human Activity</p> <p>1.) Use a <u>model</u> to <u>represent</u> the relationship between the <u>basic needs</u> (shelter, <u>food, water</u>) of different <u>plants and animals</u> (<u>including humans</u>) and the places they live.</p> <p>K.W.TTP.3 With <u>prompting</u> and <u>support</u>, use a combination of drawing, <u>dictating</u>, and/or writing to <u>narrate</u> a single event.</p>	<p><i>What question(s) or I Can statement(s) drive your instruction?</i></p> <p>EQ: Why do birds design and construct their nests the way they do?</p> <p><u>I can design a bird’s nest using data retrieved from prior lessons.</u></p> <p><u>I can construct a bird’s nest using the appropriate materials.</u></p> <p><u>I can defend my reasoning when asked to during a discussion or in writing.</u></p>
<p>Lesson Objective(s) – Student Learning Outcome(s) for this learning experience</p>	
<p><i>Objectives use active verbs, are measurable (if applicable), and link to standards. Consider using Bloom’s Taxonomy or Webb’s Depth of Knowledge.</i></p> <p>TLW design, construct, and then test their bird’s nest to determine if their design will adequately keep a bird’s egg safe.</p> <p>TLW defend their reasoning through a discussion or in writing.</p>	
<p>Knowing Your Learners</p>	
<p><i>Describe pre-requisite skills students already know that will help them meet the lesson objective(s). What is your evidence that students need this/these skills(s)? This may include pre-assessment data; student personal, cultural or community assets you have gathered and observations you have made concerning your students.</i></p> <p>This is the final lesson in a two-week long unit on how animals build their shelters to protect them, and their young, from predators and the elements. Students have researched ways animals use their shelter to protect themselves through various activities. I know my students are ready for this activity because they have mastered previous lessons on this topic. They have completed a math activity that allowed them to retrieve data that they will use when constructing their bird’s nests. There have been rich discussions on the topic of bird’s and how they build their nests as well. I have observed, through previous lessons and discussions, the students using new terminology in the appropriate way. I also know my students are ready for this activity because they have taken the time to design their bird’s nests and used data they retrieved from</p>	

previous lessons. I believe this activity will be a great activity for the students to wrap up the unit on shelter and how animals use it to protect themselves.

Assessment/Evaluation

<p><i>How will students demonstrate understanding of lesson objective(s)?</i> TLW demonstrate understanding of the lesson by accurately constructing their bird’s nest using the appropriate material and taking their bird’s egg measurement data into consideration. TLW demonstrate understanding of the lesson by using their writing skills to reflect on their experience in constructing the bird’s nest.</p> <p><i>Formative: How will you monitor student progress towards lesson objectives as you are teaching?</i> I will use an informal assessment to determine the student’s understanding of bird’s and how they build their nests. Throughout the lesson I will be observing and using anecdotal notes during the group activity. I will go around and listen for students to use the correct terminology such as <i>shelter</i> and <i>predator</i>. I will also be asking questions to deepen the student’s thinking and asking them to defend their answers. On my anecdotal sheet I will take note of students who are using the new terms correctly and those who may need some more instruction.</p> <p><i>Summative: What evidence (formative and/ or summative) will you collect and how will you document student learning/ mastery of lesson objective(s)? A summative assessment is not needed for every lesson, however, it is required for every lesson submitted for CAEP data collection points I, II, and III.</i> TTW gauge student’s mastery of the aligned standards and objectives by having the students take part in a reflective writing piece at the end of the activity. In the student’s journal entry to the students will answer the following questions. 1.) What changes would you make to your final design? 2.) Do you feel that you learned what animals’ need in terms of shelter? 3.) Do you understand how to make and use a model? 4.) Do you feel that you tried your best in this Unit? I will use a writing rubric to grade the students journal writing. There will be 5 sections on the rubric that students will be assessed on. Those sections will be, punctuation, capitalization, grammar, content/ideas, and spelling. For</p>	<p>Assessment/Evaluation Modifications <i>What modifications will you make on assessments/ evaluations for students with diverse and/ or special needs (i.e. students with IEP or 504, struggling learners, advanced learners) and will these modifications be within/ for small groups or individuals?</i></p> <p>All IEP/504 plans will be met during the lesson. For my one student that gets distracted easily, I will provide them with a job during the lesson to keep them focused on the lesson. For my non-mastery students, I will have an individual meeting with them and provide them with more instruction.</p>
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students to be considered mastery they will need to score *Excellent* on 4 out of the 5 sections. To be considered emerging they will need to score *Good* on 4 out of the 5 sections. Lastly, for students to be considered non-mastery they will score *Fair* or *Needs Improvement* on at least 3 out of the 5 sections on the rubric. If students are non-mastery they will be given further instruction.

Academic Feedback: *How will you give academic feedback? How will your academic feedback promote student understanding of the learning objective(s) or state standard(s)?*

Throughout the entirety of the lesson, I will be providing the students with positive academic feedback. During the group discussion, when I am giving students examples of how different bird’s build their nests , I will give feedback such as, “*I agree with your answer, but why do you think bird’s build their nests high in trees?*” By providing this feedback, it will allow the student to think more deeply about the reason behind their answer. Another example could be, “*I appreciate how hard you worked on choosing the appropriate materials for your bird’s nest.*” The feedback gives credit to the child for paying attention to detail when constructing their bird’s nest.

Academic Language Demands

Function and Product of the Lesson *The function is the verb, usually a Blooms verb (e.g., analyze, interpret, recount), that guides the language objective of the lesson. This includes a product that students will either write, say, present, or do that involves Academic Language (e.g. essay, present, recount).*

TLW construct a bird’s nest and determine if their design will adequately protect a bird’s egg

TLW defend their reasoning when asked to.

Academic Vocabulary *What specialized terms and phrases do students need to understand what they are expected to do? How does this vocabulary connect to the objectives, state standards and function of the language demand?*

Model (Review)- A three-dimensional representation of a person or thing or of a proposed structure, typically on a smaller scale.

Represent (Review)- To present again or anew.

Prompting (New)- The action of saying something to persuade, encourage, or remind someone to do or say something.

Support (Review)- To give assistance to; enable to function or act.

Dictating (New)- Say or read aloud (words to be typed, written down, or recorded on tape).

Narrate (Review)- Give a spoken or written account of.

The students will need to understand these words so they can be actively involved in the lesson. The students need to have knowledge of the words *model* and *represent* so they can understand the instruction of the lesson. They will need to make a model to represent a bird's nest. They will need to have knowledge of the remaining words in order to effectively master the writing standard.

Content Vocabulary *What are the key vocabulary words, symbols, or sounds in this lesson? How does this vocabulary connect to the objectives, state standards and function of the language demand?*

Basic Needs (Review)- A minimal list of elements that human beings necessitate, in order to fulfill basic requirements and achieve a decent life.

Shelter (Review)- A place giving temporary protection from bad weather or danger.

Predator (New)- An animal that naturally preys on others.

Elements (New)- The weather, especially strong winds, heavy rain, and other kinds of bad weather.

Students will need to understand the following words in order to master the standard, objectives, and given content. They will need to have knowledge of the word's *predator* and the *elements* in order to understand what they are creating their bird's nest for. To protect the bird from predators and the elements. Without knowledge of these words they will be unable to effectively master the lesson.

Syntax and/or Discourse, Mathematical Precision (math only). ~~This section is not required for Early Childhood or Special Education.~~

Syntax *What are the specific ways or conventions for organizing symbols (e.g., linear, horizontal), words (grammar), phrases, or graphics that students need to know to be able to do what you are asking?*

Discourse *What are the specific ways in which members of a discipline (e.g., scientist, historian, etc.) talk, write, and communicate knowledge that students need to know to be able to do what you are asking (e.g., essays, presentations, performance, journal, debate, historical account, signal)?*

Language Supports *What general instruction will you provide to help students in the whole class (e.g., word walls, learning partners, guided notes) learn the discourse/syntax? What focused instruction (e.g., Venn diagrams, graphic organizers, outlines, student examples, sentence stems) will you provide to help students learn the discourse/syntax (can be completed in small groups)? What individual instruction that targets the needs of an individual student(s) will you provide to help that student(s) learn the discourse/syntax? What opportunities will you provide for students to practice language/vocabulary and develop fluency? What tools (e.g., EQ or vocabulary board, Venn diagram, anchor chart, vocabulary cards, graphic organizer, peer support, sentence stems, pictures, table, chart, thinking map, modeling, sort, song, body movements, games) will you use to help students meet the language demands?*

I will have a word wall posted that has all our previous words listed on it. For our new vocabulary terms, I will have the words posted on the Smart board. I will remind the students to refer to these words posted on the Smart

board or the word wall. During our whole group discussion, I will allow for peer support. When asked a question during the discussion and the child does not understand they can call on a peer for help.

General Supports – *Strategies used to support the whole class and may be used to support more than one demand (e.g., Venn diagram, learning partners, word wall, anchor chart, vocabulary cards, graphic organizer, sentence stems, pictures, table, chart, thinking map, modeling, sort, song, body movements, games). These strategies can cross disciplines and be used in a variety of lessons.*

For general supports I will have learning partners for our group activity. Students will have the opportunity to work together as they construct their bird’s nest. I will also provide many pictures of different bird’s nest the students can look at to gain ideas from.

Targeted Supports – *Strategies that focus toward a specific language demand (e.g., Venn diagrams, graphic organizers, outlines, examples, sentence stems). These may be addressed during small groups. These can be general supports that are modified for specific students or groups of students.*

For targeted supports, I will use many examples during small group and individual instruction. Throughout our small group time, I will provide an ample amount of examples so the students receive more practice to master the lesson objectives.

Individual Supports – *Supports used to target the specific needs of an individual student (e.g., ELL, student with autism, struggling reader or writer, student with significant language delays). These students may or may not have been formally identified and may or may not have an IEP or 504 plan.*

For my ELL student they will have the opportunity to work in a group, therefore their peers will be there for support or help if the teacher is unable to help at the time. For my struggling writers I will allow them to draw out how they could have better designed their nest. I will also have them verbally answer the remaining questions, for the journal writing, so I can get a clear picture of what they know.

Instruction – When designing your instruction, consider when you will implement formal and informal assessments/evaluations, when you will provide feedback, and when you will teach academic language. Therefore, this section should include aspects written above.

Lesson Part	Description of Activities and Instruction (Teacher Does)	Description of Activities and Instruction (Students Do)	Meeting Individual & Group Needs /Learning Styles <i>Plans instruction to meet the needs of individual students. Adaptations are tied to learning objectives. Specific individual or group learning includes requirements in IEP or 504 plans.</i>
Set/Motivator: <i>Restate and address your Essential Question. How do you engage student interest in the content of the lesson? How does this relate to previous learning? Use knowledge of students’ academic, social, and cultural characteristics.</i>	1. I will first call the students up a table at a time to the rug.	2. TSW come to the rug as their table is called. 3. TSW be actively involved in the discussion about the EQ,	7. All IEP and 504 plans will be addressed

	<p>2. I will go over the EQ, I can statement, and lesson objectives with the students.</p> <p>3. I will go over our review words from the unit.</p> <p>4. Next, I will show students different videos of bird’s building their nests. https://www.youtube.com/watch?v=qbWM1QAVGzs https://www.youtube.com/watch?v=UZ_-6Rtlv0o</p> <p>5. I will then introduce students to our new vocabulary terms.</p> <p>6. I will allow time for students to ask any questions or concerns they might have about the new vocabulary terms.</p>	<p>I can statement, and lesson objectives.</p> <p>4. TSW answer any questions about the review words from the unit.</p> <p>5. TSW watch the video to gain any extra ideas for their bird’s nest</p> <p>6. TSW ask any questions they might have about the new vocabulary terms.</p>	<p>throughout the lesson.</p> <p>For my student that gets anxious when transitioning to the rug from their desk I will give them a handle signal notifying them when their table will be called next.</p>
<p>Instructional Procedures/Learning Tasks: <i>Provide specific step-by-step details of lesson content aligned with objectives, utilizing a variety of teaching strategies.</i></p>	<p>1. After our discussion on our new vocabulary, we will review the different ways bird’s build their nests to protect themselves and their</p>	<p>1. TSW be actively involved in the review discussion on birds and their nest building.</p>	<p>1. I will make sure to call on a variety of people throughout</p>

	<p>young from predators and the environment.</p> <p>2. We will then have a discussion based on the bird's nest designs, the students created in the previous lesson.</p> <p>3. During our discussion I will have my assistant begin to set out the materials that will be used for the activity.</p> <p>4. When the materials are ready I will split the students up into their groups, based on their table.</p> <p>5. The students will begin constructing their bird's nest using the appropriate materials.</p> <p>6. Throughout the activity I will be walking around taking notes of correct terminology used and observing their thinking.</p> <p>7. I will also be there to ask questions and give positive feedback.</p>	<p>2. TSW display their bird's nest designs and discuss their ideas.</p> <p>3. TSW stay with their table groups to complete the activity.</p> <p>4. TSW begin to construct their bird's nest using the appropriate materials.</p> <p>5. TSW work together to create a bird's nest that will protect the bird's egg.</p> <p>6. TSW answer any questions the teacher may ask and will call on a peer for support if needed.</p> <p>7. TSW then test their bird's nest.</p> <p>8. TSW reflect, in their journals, ways they could have designed it differently</p>	<p>the lesson, so everyone has the chance to state their ideas.</p> <p>2. I will use the same hand signals during the transition from rug to table for my student who get anxious during transition.</p> <p>3. For struggling students, they will have the opportunity</p>
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	<p>8. When students have completed their bird’s nest they will then test it out by sitting it on chair and having someone move it back and forth acting as the wind.</p> <p>9. When the testing is complete I will have the students reflect, in their journals, what they would change about their design and what they feel was a strength of their design.</p>		<p>to call on their peers for support in their group.</p> <p>4. I will allow extra time for the activity if needed.</p>
<p>Questions and/or activities for higher order thinking: <i>These are open-ended and cannot be answered by yes or no. These can be asked at various points throughout the lesson and guide rather than direct student thinking.</i></p>	<p>1. <i>Why do you think that it is important for a nest to be the right shape to hold an egg?</i></p> <p>2. <i>Have you ever seen different types of nests that birds build? If so, where? What were the shapes?</i></p> <p>3. <i>If an ostrich wants to build a nest, where would be a good place for it? In a tree or on the ground? Why?</i></p>	<p>Provide exemplar student responses here.</p> <p>1. I think it needs to be the right shape so the egg doesn’t roll out and it can stay protected.</p> <p>2. I have seen one. I saw one in a tree next to my house. It had little blue eggs in it and it was shaped like a bowl. The eggs seemed safe inside.</p>	<p>6. The student can phone a friend if they are struggling with a question.</p> <p>7. For students who need more challenge they can</p>

		<p>3. I think it would be best for an ostrich to build its nest on the ground because it can't fly so it couldn't reach its eggs in a tree. It would also need to be big and it might not fit in a tree.</p>	<p>compare the difference between their bird's nest and a peer and then write about their differences.</p>
<p><i>Closure: Makes clear connections to real-world situations and requires students to reflect on and apply their learning through verbal or written expression.</i></p>	<ol style="list-style-type: none"> 1. After the students have written in their journals we will have one final discussion. 2. We will review, once again, our EQ, I can statement, and lesson objectives. I will also have the students discuss what they learned in the lesson. 3. I will connect this lesson to the real-world by providing many examples of different nests birds create. 4. I will have the students turn their journals in for me to grade as an exit ticket for the lesson.. 	<ol style="list-style-type: none"> 1. TSW be actively involved in the final discussion on the EQ, I can statement, and lesson objective. 2. TSW discuss all the new things they learned in the lesson. For example, the nest needs to be large enough to hold the egg but small enough to protect it. 3. TSW turn their journals in as an exit ticket. 	<ol style="list-style-type: none"> 3. I will have the new and review terms still posted on the Smart board so the students can point to the term I am talking about if needed.

			<p>4. I will allow the students to think-pair-share ideas about real-world connections.</p>
<p>Material/Resources: <i>What do you need for this lesson? Identify, within a bulleted list, the specific materials and resources that you will use. Describe how these materials and resources add value, depth, and extend students' learning.</i></p> <ul style="list-style-type: none"> • Plastic eggs • Pictures of bird's nest • Paper • Cups • Milk cartons • Yarn • String • Plastic bags • Branches • Cloth (old rags or shirts) • Leaves • Cardboard • Cotton balls 		<p>Technology: <i>(a) Describe the technology you plan to use in your lesson, (b) How does the identified technology in your lesson improve student learning? If applicable, (c) explain how you will use this technology to support a variety of student needs within the learning environment, and (d) If you used this technology to design and implement formative and/or summative assessments, please explain. Did you use the technology to collect and/or analyze your data to inform instruction? Explain.</i></p> <p>In this lesson, I will be using a Smart board. The Smart board will be used to display the review vocabulary words. During the entirety of the lesson, I will keep these vocabulary words posted so the students can refer to them as needed. This will improve my student's learning because they are able to see the vocabulary words in print and they can begin to make the connection between what the word sounds like and what the word looks like. I will also be playing videos on the Smartboard of different birds and how they build their nests. This will improve my students learning by allowing my more visual learners to begin to make the connection of how birds build their nest.</p>	

All the materials listed play a key role in the lesson. The plastic eggs are used for students to build their bird’s nests around. The other materials are used for the students to build their bird’s nests with. Without these materials the students would be unable to complete this hands-on activity that allows them to make connections to the real-world.

Co-Teaching Strategies Used: *(highlight and explain all that apply): One Teach, One Observe; One Teach, One Assist; Station Teaching; Parallel Teaching; Supplemental Teaching; Alternative (Differentiated); Team Teaching*

I will use the One Teach, One Assist strategy. The assistant will help setup the bird’s nest activity. The assistant and I will walk around and assist students if needed during the activity. I will also be walking around and facilitating instruction as well.

Management

Management: *Explanation of processes and/or procedures, transitions from one activity to another, strategies for gaining attention, motivating students to engage in the lesson and focus on learning (e.g. work boards, posted procedures, modeling, positive feedback, redirection). If management decisions were addressed above, please bold those processes and procedures.*

I will transition the students from their tables to the carpet **one table at a time** to keep things safe and organized. I will use a **hand signal** to notify my student who gets anxious during transitions so they can prepare for when their table is called. I will use redirection during the entirety of the lesson to keep my students focused and on track. . I will have the students work in their **assigned table groups** during the activity, so they use each other for peer support. I will give positive feedback throughout the lesson and activity. I will also have the students **connect the lesson to their own life** to make the content more meaningful.

Theory/Rationale

I chose to do this activity as my final lesson in the unit because it allows the students to be actively involved and it is an inquiry-based activity. This is also a STEM activity. This activity integrates ideas on science, engineering, and math. According to Lange, Brenneman, and Mano, “STEM explorations can support critical and logical thinking, problem solving, and literacy development” (p.2, 2019). In this activity students will explore science ideas about animals and how

they build their shelters to protect themselves from predators and the elements. Students will use their engineering skills to construct their own bird's nest out of materials provided by the teacher. By the time this activity occurs, the students will have already used math concepts to retrieve data to use for their bird's nest. This activity, as well, incorporates inquiry-based instruction. This activity is inquiry based because students are allowed to construct their own ideas and they have an opportunity to explore various materials. This activity allows students the opportunity to be actively involved in a hands-on lesson.

Date:

Anecdotal Notes

Lesson Objective:

Student	Mastered	Emerging	Non-mastery
1.)			
2.)			
3.)			
4.)			
5.)			
6.)			
7.)			
8.)			
9.)			
10.)			

Enrichment

Follow Up

Notes

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Writing Rubric

Name _____

	Needs Improvement	Fair	Good	Excellent
Punctuation <i>Student uses accurate punctuation.</i>	1	2	3	4
Capitalization <i>Student uses capital letters to begin sentences and for names.</i>	1	2	3	4
Grammar <i>Student uses subject/verb agreement and writes complete sentences that make sense.</i>	1	2	3	4
Content/Ideas <i>Student writes on topic and adds details.</i>	1	2	3	4
Spelling <i>Student writes most sight words correctly and applies spelling rules.</i>	1	2	3	4

Unit Evaluation Plan (f)

K.ESS3: Earth and Human Activity 1.) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.

Overview.

I will use both formative and summative assessment during this Unit Plan. Evaluations will assess whether or not children have learned the science content and practices related to my Earth and Human activity standard, “Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.” I will use a variety of methods to assess students understanding along the way, such as observations, anecdotal notes, discussions, and a formal summative assessment (also part of the Evaluate phase of the 5Es) where the students create their own bird’s nest and journal about their experience creating the nest. The assessment plan takes into consideration children’s individual abilities and cultures by allowing them the opportunity to discuss with their peers about their learning. It also allows them to express themselves through journaling and writing.

Formative.

I will use formative assessment during each of the major activities to assess understanding. During the very first Engage activity, I will listen for students’ use of the terms, shelter and needs, and keep track of any misconceptions such as plants, animals, and humans all need the same type of food, water, and shelter. During the Explain phase, I will listen for students to use the terms shelter and needs appropriately. For example, shelter not only provides the animal with a home, but it also protects them from predators. Needs are materials we have to

have in order to survive. In addition, I will use methods such as questioning to determine to progress of the students. For example, on day 1, when reading the story “What Do Living Things Need?”, I will ask the students questions such as, why do animals need shelter? And what are some needs that a bird might need? I will also use observations during the math activity, when they measure and weigh different eggs and document their answers, to check whether children are engaged in planning and carrying out investigations (science practice).

Summative.

During the final experience of the Unit Plan, students will be asked to create their own bird’s nest. During this activity, the students will have to make the nest the correct size for the egg (math, measurement connection) and use the appropriate materials that will keep the bird and eggs the safest. I will use observations and anecdotal notes during the activity to determine the students’ understanding of the lesson. I will also ask children to tell why they chose to design the bird’s nest the way they did and why they believe these materials will keep the bird and egg the safest. The students will assess their own learning by documenting the materials they used and explaining their design of the bird’s nest in a science journal. They will also assess their own learning by responding to questions about 1) whether they think they learned what animals’ needs are in terms of shelter, 2) if they understand how to make and use a model (a science practice), and 3) if they think they tried their best during this Unit (habit of mind/approach to learning).

A Letter to Parents (g)



Dear families,

Hello everyone! I hope you all are having a great year so far! I just wanted to let you all know that we are starting a brand new, two-week, unit on animals and how they build their homes to protect them from predators and the outside elements. By the end of this unit, your student will have mastered the TN Academic State Standard, **K.ESS3: Earth and Human Activity 1.**) Use a model to represent the relationship between the basic needs (shelter, food, water) of different plant and animals (including humans) and the places they live. Throughout this unit we will be taking part in the 5Es learning cycle. Each day we will accomplish one of the 5Es (engage, explore, explain, elaborate, and evaluate). Through this learning process, your child will have the opportunity to think more deeply about topics and take part in many hands-on activities. This is an integrated unit, therefore, we will be following this topic throughout each subject area. For week one, we will be learning about animals, in general, and how they build their homes. We will be taking a nature walk to explore different animal shelters we can find around the school! We will also be reading the book, *What Do Living Things Need?* by: Elizabeth Austen. To finish week one off, your child will have the opportunity to create their own shelter for a given animal. For week two, we will be focusing on birds and how they build their nests to protect themselves, and their young, from predators and the outside elements. This is going to be a really exciting week! Your child will have the opportunity to learn all about how birds build their nests. For our math lesson, your child will measure the length and weight of different birds' eggs. To finish the week off, your child will design and construct their own bird's nest out of different materials! When this unit is complete there are many different ways we can extend this topic throughout the year. We can test our bird's nest in different situations such as heavy rain or wind. We can also begin to research different specific animals and how they use their home as protection. While you're out and about, look for birds' nests, or other animal shelters, and see how much your little scientists know about animals and their homes. I am sure they will blow you away with all their knowledge! If you have any questions or concerns please feel free to contact me at any time via phone or email. I cannot wait to see what all this unit has in store for us!

Sincerely,

Miss Alyssa Hare

List of References (h)

- Bybee, R.W. (2014). The BSC'S 5E instructional model: Personal reflections and contemporary implications. *Science and Children*, 51(8), 10-13.
- Dees, K. (2018, April 3). Bird Nest Sensory Bin. Retrieved from <https://www.fantasticfunandlearning.com/bird-nest-sensory-bin.html>
- Lange, A.A., Brenneman, K., & Mano, H. (2019). Teaching STEM in the Preschool Classroom: Exploring Big Ideas with 3-to 5-Year-Olds. New York, NY: Teachers College Press.
- National Research Council. (2012). *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Committee on a Conceptual Framework for New K-12 Science Education Standards. Board on Science Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- National Science Foundation. (2000). Inquiry: Thoughts, Views, and Strategies for the K–5 Classroom. In (monograph), Inquiry: A monograph for professionals in science, mathematics, and technology education (Volume 2). Washington, DC: Author.
- Ritz, C.W., & Straits, W. (2019). Building a Better Bird's Nest. *A Head Start on Science*, 47. <https://common.nsta.org/resource/?id=10.2505/978-1-68140-639-8.4L>
- Follow. (2012). Learning Theory – Constructivism. Retrieved from <https://www.slideshare.net/sjestus/learning-theory-constructivism-12333069>
- Tennessee State Board of Education. (2016). *Tennessee Academic Standards for Science*. Nashville, TN: Tennessee Department of Education. <https://www.tn.gov/education/instruction/academic-standards/science-standards.html>

Van de Walle, J. A., Lovin, L. H., Karp, K. S., & Bay-Williams, J. M. (2014). *Teaching student-centered mathematics: Developmentally appropriate instruction for grades pre-k-2* (3rd ed.). Boston, MA: Pearson.

List of Resources Used in the Unit (i)

Teachers

Lange, A.A., Brenneman, K., & Mano, H. (2019). *Teaching STEM in the Preschool Classroom: Exploring Big Ideas with 3-to 5-Year-Olds*. New York, NY: Teachers College Press.

National Science Foundation. (2000). *Inquiry: Thoughts, Views, and Strategies for the K–5 Classroom*. In (monograph), *Inquiry: A monograph for professionals in science, mathematics, and technology education (Volume 2)*. Washington, DC: Author.

Pickrell, J., Temming, M., & Buehler, J. (2020, April 15). *Animals*. Retrieved from <https://www.sciencenews.org/topic/animals>

Tennessee State Board of Education. (2016). *Tennessee Academic Standards for Science*. Nashville, TN: Tennessee Department of Education. <https://www.tn.gov/education/instruction/academic-standards/science-standards.html>

Ritz, C.W., & Straits, W. (2019). *Building a Better Bird’s Nest*. *A Head Start on Science*, 47. <https://common.nsta.org/resource/?id=10.2505/978-1-68140-639-8.4L>

Families

BreedloveAnnette, A. (2020, May 4). *Travel the World through LIVE Animal Cams*. Retrieved from <https://homeschoolgiveaways.com/2019/10/travel-the-world-through-live-animal-cams/>

Quixot Kids- Edu. (n.d.). *Animals And Their Homes* [Video]. YouTube. https://www.youtube.com/watch?v=kj3Uk_An_Ak

45 Amazing Children's Books About Animal Homes. (2019, January 19). Retrieved from
<https://bookroo.com/books/topics/animal-homes/>

Children

KidsEduc – Kids Educational Games. (2015, February 14). *Animals and Their Homes- Fun Learning Games for Kids*. [Video]. YouTube.

<https://www.youtube.com/watch?v=2RfZ0L3rh0w>

NewDay. (n.d.). *Birds building nest*. [Video]. YouTube.

https://www.youtube.com/watch?v=UZ_-6Rtlv0o&t=11s

Squire, A. (2001). *Animal homes*. New York: Childrens Press.