Science

Jamee Miner

2nd and 3rd grade

Teaching Nat. and Soc. Science

**Table of Contents:**

Overview – 3

Background Information – 3

Unit Objectives – 3-5

Initiation - 5

Individual Lessons – 5-27

Bulletin board Sketches/Pictures –

References – 29

Reflection –

**Overview**

 My partner and I worked with students in 2nd and 3rd grade from the Girls Inc. program in Omaha, Nebraska, and focused on applying science to real life. By showing the girls how science is used for understanding the butterfly, applying life cycles and habitats, we were able to help the students understand and enjoy science. They were able to use proper science techniques, remember what they learned, and apply concepts to today to help them tomorrow.

**Background Information**

 In choosing our lessons we looked at a wide variety of ways science is applied every day. We focused on the concepts of life cycles and habitats.

We included games, art, technology, and a service learning project for the girls to partake in. This helped them actively apply what they learned.

 We used art, literature, math, and social science several times, because they so easily integrate with science. For example, books, etc.

**Unit Objectives (Just Science – not math, lit., etc.)**

Lesson One: Getting to know you

Students will be able to: Write at least one thing that makes them special and share their poster with a teacher or in front of class.

Lesson Two: Color Exploration Name tag

Students will be able to:Mix colors using eye droppers, Experiment using primary colors to create secondary colors, Verbalize their findings with peers and teacher.

Lesson three: Nature walk/intro to life cycles and habitats

Students will be able to do: Verbalize what a life cycle and habitat is, Recognize their surroundings such as, insects, plants, etc. Examine & talk about the life cycles and their habitats, Explore varies areas

Lesson four: Grow me a beanstalk

Students will be able to do: Sketch and write their observations as their lima bean grows. Explain and label the different parts of the plant (root, stem, leaves, flower, seed). Identify and correctly sequence the life cycle of a lima bean (seed stage, plant stage, flowering stage, fruit stage and death stage). Examine the growth of a lima bean over a four week span. Summarize the lima bean experiment including the needs of a plant (food, air, water, light, and a place to grow) to an adult or peer.

Lesson five: Egg

Students will be able to do: Learn why and where a butterfly lays an egg. Distinguish the different types of eggs. Know the names of some of the main butterflies. Know the environment to find a butterfly egg

Lesson six: Caterpillar

Students will be able to do: Identify what they think it the right thing for a caterpillar to eat. Explain when the caterpillar will go into the chrysalis stage. Identify the steps a caterpillar goes through. Summarize different facts about caterpillars

Lesson seven: Chrysalis

Students will be able to do: Demonstrate knowledge in the life cycle by completing life cycle computer game. Practice writing the names of the stages on coloring page handout. Repeat three characteristics of the Chrysalis (Pupa) life stage to peer or teacher.

Lesson eight: Butterfly

Students will be able to do: Identify the parts of a butterfly. Identify what butterflies eat and the habitat it needs to be in. Explain all the different stages of the butterfly

Lesson nine: Grow me a beanstalk 2nd lesson

Students will be able to do: Sketch and write their observations as their lima bean grows. Explain and label the different parts of the plant (root, stem, leaves, flower, seed). Identify and correctly sequence the life cycle of a lima bean (seed stage, plant stage, flowering stage, fruit stage and death stage). Examine the growth of a lima bean over a four week span. Summarize the lima bean experiment including the needs of a plant (food, air, water, light, and a place to grow) to an adult or peer.

Lesson ten: Butterfly Lifecycle

Students will be able to do: Explain and label the different parts of the butterfly lifecycle. Identify how the butterfly started out from the beginning and the stages it goes through. Summarize the butterfly lifecycle and the different parts (Egg, Caterpillar, Chrysalis, Butterfly)

Lesson eleven: Zoo

Students will be able to do: Explain life cycles of different animals. Understand the order they go in. Demonstrate knowledge of the different habitats

**Initiation**

The activities that we did involved the girls and they would have to talk with each other if somebody else had something they wanted. Also, the discussions we had involved everybody and they also talked with each other. The service learning project that we did involved everybody working together to make something for the zoo for coming to talk to them.

**Lesson Plans:**

Lesson 1

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| --- | --- | --- | --- |
| **Your name: Julie Shelburne, Brooke Martin, Jamee Miner, Jaqueline Chavez & Shelby Nosal** | **Grade level: 2nd-4th**  | **Subject: Science** | **Time frame:****45 minutes** |
| **Nebraska State Standard:** |
| **Objectives:** The students will be able to*:**Write at least one thing that makes them special and share their poster with a teacher or in front of class.* |
| **Assessment: Teacher will check paper for participation in activity.** |
| **Content Knowledge:** *Getting to know each other and the teachers.* |
| **Teaching Methods/Strategies:** *Whole group sharing, individual conversations with students as they work.* | **Differentiation:***Students will be invited to create their own “All About Me” poster in whatever manner they would like using markers. Students who are unable to write will be allowed to draw pictures. Students who are unable to speak in front of the group will choose a teacher or peer to read their poster to the class.* |
| **Materials: Name tag labels, washable markers, large paper, yarn, colored water, eye droppers, permanent markers, story; Stand Tall Molly Lou Melon** |
| **Lesson Procedure** |
| **Anticipatory Set:** *We will begin the time reading the story, Stand Tall Molly Lou Melon to introduce getting to know someone new and unique attributes.*  |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**Our webbing activity at the end of the lesson will continue to engage the students in sharing about special characteristics. Some may be a review of information already shared while new information may be presented as we sit together in a circle and share. Yarn will be passed to students as they share information about themselves. |
| **Teacher will do:****Introduce themselves to students****Make a name tag****Read “Stand Tall Molly Lou Melon”****Share a poster about special characteristics****Lead conversations with each student about what they are drawing or writing on their poster****Ask leading questions to students as they share****Initiate webbing activity****Clean up the yarn and supplies** | **Student will do:****Introduce themselves to the teachers****Make a name tag****Listen to story****Listen to teacher posters****Create own “All about me” Poster****Share what their poster says** **Participate in webbing activity****Help clean up area** |
| **Closure: We will finish our time with a webbing activity in which the girls and teachers sit around the circle and share special characteristics about themselves. The yarn will create a web throughout our circle “tying” us together for our semester of SMART.****If we continue to have more time we will begin a color lesson which will follow our first lesson in the classroom (Color Name Tags). The students will experiment with mixing PRIMARY colors on paper using colored water (red, blue and yellow) to create (bleed) secondary colors. The paper will then turn into students name tag for each session.** |
| **Reflection:** *I thought that this activity went well for it being the first activity that we did with the girls and since we added two groups together. I think that the students really enjoyed making their posters for us and talking about them to us. The book that we read at the beginning with the students went well too most of them seemed to know the book before we had read it so some of them we saying the lines as we were reading it which was fun for them.* |

Lesson 2

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| **Your name: Julie, Brooke and Jamee** | **Grade level: 2nd-3rd**  | **Subject: Science** | **Time frame:** **45 minutes** |
| **Nebraska State Standard:**SC2.1.1.b Conduct simple investigations SC2.1.1.c Select and use simple tools appropriately SC2.1.1.f Use drawings and words to describe and share observations with others  |
| **Objectives:** The students will be able to*:**Mix colors using eye droppers* *Experiment using primary colors to create secondary colors.**Verbalize their findings with peers and teacher.* |
| **Assessment:** Teacher will observe students during their exploration time to check if secondary colors are visible on their paper. Teacher will carry dialogue with each student for terminology (primary/secondary colors) and if student is able to report findings. |
| **Content Knowledge:** *Primary colors are colors that you cannot create from any other color. Secondary colors are colors that you can create using primary colors. May need to teach how to use an eye dropper; how to squeeze and suck water up and then squeeze again to allow water to drop out. Students will also learn about color ‘bleeding’ which will be defined as colors mixing with each other as they spread through the paper.*  |
| **Teaching Methods/Strategies:** *Whole group instruction to begin lesson, one-to-one interaction while students are engaged in activity to assess student findings. Students will talk to table partners about their explorations.*  | **Differentiation:***For the child whose favorite color is black or white ask them to experiment with the other colors. Students who are unable to squeeze an eye dropper will be allowed to use a ¼ teaspoon to drop color onto their paper to find how the colors mix together.* |
| **Materials: Permanent markers, white construction paper, colored water (red, yellow and blue), eye droppers, Styrofoam bowls, paint shirts, yarn, poster board, and questionnaire.** |
| **Lesson Procedure** |
| **Anticipatory Set:** *Students will sign in using their favorite color. They will have the opportunity to verbalize why they like this color. (Begin lesson with rules and procedures in the classroom, introduce bulletin board)* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**Teacher will introduce primary and secondary colors with question and answer lead in. During experimentation time teacher will ask questions to check for understanding of primary colors, secondary colors and the “bleeding” done on the paper. Teacher will also view students’ effective use of the eye dropper to disperse color on their paper. |
| **Teacher will do:*** Provide chart on poster board and markers for signing in (since the girls like checking themselves in, they will begin their own sign in on a large piece of poster board and mark they are present)
* Question students about their choice in marker, what things do you like that are that color?
* Explain experiment procedures and rules “You will approach the table and gather the following supplies; one eye dropper, one piece of paper, a tray and a paint shirt. The teacher will disperse colored water to groups of three. Please be considerate of others in your group and share the colored water. The water will stain your clothes so please make sure you wear a paint shirt. After you receive your water you may begin using your eye dropper to disperse the colored water around the paper. Please try to cover your whole paper with color. Let’s review, what items will you gather? Who will disperse the water? When can you begin?”
* Pass out colored water to groups of three that you designate.
* Supervise and question students as they work
* Ask students to talk with their table threesomes about what they found doing this activity.
* Lead discussion about the students’ findings. Discuss primary colors, secondary colors and bleeding effect.
* Ask students to clean up their supplies. Teacher will clean up water.
* Cut and laminate name cards for students to use each class period.
* Ask students to get a marker, they are going to finish our time with a game.
* Give students the questionnaire and have them find other students or teachers who can answer one of the questions. When they are finished have the students return to their seats.
* Give a prize to each student as they leave the classroom.
 | **Student will do:*** Write their name in their favorite color on poster board.
* Verbalize why they like this color
* Listen to procedures and rules of experiment
* Participate in experiment, use eye dropper to drop color onto paper.
* Verbalize their findings (colors mixed to create other colors)
* Write their name on name tag
* Clean up supplies
* Play closing game; interact with peers to fill out their questionnaire.
 |
| **Closure:** *Talk about what combinations of primary colors made secondary colors. Ask further questions about colors and how to make them; teal, violet, lime, etc. How else could we cause colors to bleed into each other? (Markers and water, paints, etc.) Students will finish their time filling out “Find a person who…..” sheet. Each student will pick a unique color marker and help fill out peer sheets. When student has all blanks filled in; they are a winner and receive a prize on their way to the bus.* |
| **Reflection:** *I thought that the kids really enjoyed doing this activity since they got to make their own name tag and it could’ve been whatever color they wanted as long as they knew how to make it. When we did this activity it gave them a fun way to learn what colors were the primary ones and which ones were the secondary. We also taught them the rules of the classroom and where they were supposed to sign in. I think that they are going to really enjoy being able to sign themselves in instead of us just doing it for them. I think that the rules went well and that they understood what we wanted from them.* |

Lesson 3

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| **Your name: Brooke , Julie, Jamee** | **Grade level: 2nd & 3rd** | **Subject: Science** | **Time frame: 45 minutes** |
| **Nebraska State Standard:** |
| **Objectives:** The students will be able to:Verbalize what a life cycle and habitat is Recognize their surroundings such as, insects, plants, etc.Examine & talk about the life cycles and their habitatsExplore varies areas |
| **Assessment:** Teachers will explain what a life cycle and habitat is. We will take them outside and observe insects and talk about their habitats and life cycles.  |
| **Content Knowledge:** *Teachers will help students understand a habitat is the environment an animal, plant, etc comes from.**Teachers will talk about life cycles such a butterfly which goes through the egg, larva (caterpillar), chrysalis, then adult (butterfly.)**Teachers will explain this is called metamorphism.* *The main concept is we get the children engaged of the knowledge what habitats and the life cycles animals, plants go through.* |
| **Teaching Methods/Strategies:** *This will be a group explanation. We will have the kids raise their hands if they know the answer. This is to see if the kids have any knowledge what we are teaching.**When we are outside they can talk about life cycles with a partner.* | **Differentiation:***If students do not know any information, they can ask a teacher or talk it over with their table partners and come up with an answer together.* |
| **Materials:** Journals, pen |
| **Lesson Procedure** |
| **Anticipatory Set:** Ask the students what they know about butterflies. We will take every student outside and ask them to find a plant, insect, butterfly etc and talk to a partner about their life cycles. Students need to know the definition of a habitat and life cycle before they can go outside and examine. Teachers can show pictures of a butterfly metamorphism. Or even a plant life cycle  |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**During the discussion, teachers will ask questions such as what do you know about life cycle and habitats? We will ask questions to make sure the students are understanding the concepts before we go outside. Teachers will analyze if they are understanding the material.  |
| **Teacher will do:****-Have students write in their journals****(The question being "What do you know about life cycles and habitats"** **-We will take attendance and have the students put a check mark by their name****-Talk and show some examples of metamorphism of a butterfly.****-Make sure the students are engaged and know the material.****-Will line up the kids and take them outside and go on a nature walk****-When outside, find plants, insects, butterflys and have the kids explain talk about their life cycles****-Come back in and clean up if any mess****-Take the students to their correct bus** | **Student will do:****-Write in their journals****-Put a check mark by their name if they are there****-Listen and engage to the teachers as they talk about life cycles****-Ask teachers any questions they might have** **-Line up in a quietly manner****-Go outside and examine the plants, insects****-Talk to a partner about the life cycles of what they examined****-Go back inside and clean up if any mess****-Line up for the bus** |
| **Closure:**Talk about different life cycles of different organisms. Have the students talk about what habitat they think it came from. What are the steps of metamorphism? Students will finish their time with a partner writing down what habitats animals come from. |
| **Reflection:** *I thought that the students have like this lesson the best so far since we didn’t stay in the classroom we got out and did something. I thought that they enjoyed going outside for a little bit to look for different animals and insects. Going outside was a good way for us to keep the kids engaged about life cycles since we were doing something different and fun for them.* |

Lesson 4

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| **Your name: Julie, Jamee, Brooke** | **Grade level: 2nd and 3rd grade** | **Subject: Science** | **Time frame:** **2 lessons 45 minutes each** |
| **Nebraska State Standard:**SC2.1.1.e Collect and record observations SC5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water) SC2.3.1.c Identify external parts of plants and animals SC2.3.2.b Describe how living things change as they grow  |
| **Objectives:** The students will be able to*:** Sketch and write their observations as their lima bean grows.
* Explain and label the different parts of the plant (root, stem, leaves, flower, seed)
* Identify and correctly sequence the life cycle of a lima bean (seed stage, plant stage, flowering stage, fruit stage and death stage)
* Examine the growth of a lima bean over a four week span
* Summarize the lima bean experiment including the needs of a plant (food, air, water, light, and a place to grow) to an adult or peer.

  |
| **Assessment:** Formative assessment will happen as the students’ journal each week. Summative assessment will be a quiz after the second lesson. The second lesson will occur about four weeks after the first lesson. The quiz will consist of labeling a plant and writing what each part of a plant does to help the plant grow. The student will also sequence the stages of plant growth. Students will summarize (speak) the experiment to a teacher. The teacher will fill out assessment rubric. |
| **Content Knowledge:** We will cover the functions of plant parts, the needs of plants, the characteristics of plants and their life cycle. We will discuss a plant being a live organism even though it does not per se move. What makes a plant alive? What does a plant need to grow? What are the parts of a plant? What does the stem do? The roots? The leaves? What is the life cycle of a plant and what does it look like? a) Needs (food, air, water, light, and a place to grow);b) Parts (seeds, roots, stems, leaves, blossoms, fruits); andc) Life cycle: seed stage, plant stage (growth), flower stage (budding), fruit stage, death stage (leaves falling and wilting). What other signs of dying might you see?We will compare animal life cycles to plant life cycles in lessons to follow and assess our knowledge at the end of our life cycle unit. |
| **Teaching Methods/Strategies:** *We will use whole group instruction. The small amount of girls (8-10) allows one instructor to share basic information. The students will be asked to raise their hand to answer questions, share information or give predictions. One to one interaction will occur during observations of each lima bean. A teacher will guide students to “carefully” unwrap their bean to observe growth.*  | **Differentiation:***Students who write well will be asked to label all parts of plant. Students who are unsure of their writing will be asked to copy words from the board. Students who are unable to understand what they write will be allowed to tell a teacher what they drew and the teacher will dictate using “” what the student says.* |
| **Materials: Computer with internet access, zip lock bags, paper towels, lima beans, variety of seeds, permanent marker, water, scotch tape, pencil, journal, pictures of parts of a plant and each stage of the life cycle.** |
| **Lesson Procedure** |
| **Anticipatory Set:** *Begin the lesson with the UTUBE video of Jack and the Beanstalk-* [*https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf\_ctSG4HfKkPq3FzmilDTQ*](https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf_ctSG4HfKkPq3FzmilDTQ)*The video will engage the students in a make believe story with the main idea being a HUGE beanstalk.* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)***Question the students after the video why they thought Jack’s beanstalk grew so big? What did the beans need to grow? (light-sun, food, water, air, a place to grow) Teacher will draw these things on a poster board. This drawing will also include the parts of the plant. The girls will sequence the life cycle of a plant onto the bottom of the board working together. Teacher will then give directions (will model as gives directions) in our science experiment “growing a beanstalk.”* * Wet your paper towel
* Carefully set bean inside paper towel
* Wrap paper towel around bean
* Place bean inside zip lock bag with your name on it
* Tape lima bean to top of dry erase board (teacher)

*Each day the girls arrive for SMART class they will observe their lima bean and draw what they see. Labeling of parts they draw will be requested. Teacher will assess knowledge as they question what students are drawing, writing and observing. Teacher may also write notes in journals. Teacher will invite students to review the poster board written the first lesson.* |
| **Teacher will do:*** Ask students to draw all parts of a plant in their journals
* Play the You tube video on computer
* Lead discussion about life cycle of plant (seed stage, plant stage, flowering stage, fruit stage and death stage), what makes a plant grow-needs (food, air, water, light, and a place to grow) and parts of a plant (seeds, roots, stems, leaves, blossoms, fruits)
* Draw parts of a plant and things that make a plant grow (student suggestions)
* Supervise sequencing of plant life cycle
* Demonstrate experiment while giving directions
* Supervise students
* Share lima beans that have already been cooked
* Ask students to write predictions of their lima bean.
 | **Student will do:*** Draw parts of a plant they know
* Watch story on computer
* Participate in discussion about life cycle of a plant, what makes a plant grow and parts of a plant.
* Give suggestions on what teacher should draw on board
* Sequence the life cycle of a plant with the whole group.
* Listen to directions of experiment
* Participate in setting up lima bean experiment (wet paper towel, wrap lima bean, place in zip lock bag, close zip lock bag and bring to teacher)
* Taste a lima bean
* Write a prediction of what will happen to their lima bean.
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) When we are finished “planting” our lima beans we wil**l** taste cooked lima beans. The students will then predict (write) what will happen to their lima bean in their journals. |
|  **References:**[**http://katho3.people.wm.edu/plantunit.pdf**](http://katho3.people.wm.edu/plantunit.pdf)[**https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf\_ctSG4HfKkPq3FzmilDTQ**](https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf_ctSG4HfKkPq3FzmilDTQ)**Reflection:** *I thought that this lesson was another fun one for the kids. Each student did their own lima bean experiment and I thought that they enjoyed doing it themselves instead of us doing it. I thought that some of their predictions for the lima beans were interesting. I thought that during the plant part of the lesson we did a good job of trying to get each student to answer a question of the plant. I also thought that they enjoyed watching the video at the beginning of the lesson.* |

Lesson 5

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| **Your name: Brooke , Julie, Jamee** | **Grade level: 2nd & 3rd** | **Subject: Science** | **Time frame: 45 Minutes** |
| **Nebraska State Standard:**SC 3.3.1 |
| **Objectives:** The students will be able to:Learn why and where a butterfly lays an eggDistinguish the different types of eggsKnow the names of some of the main butterfliesKnow the environment to find a butterfly egg |
| **Assessment:** Teachers will explain why and where a butterfly lays its egg. We will then take them into an activity where they will create different types of butterfly eggs out of play dough. |
| **Content Knowledge:** *Teachers will help students understand where and why a butterfly lays its egg.**Teachers will talk about the different types of butterflies.**Teachers will explain the activity to the students.**Teachers will guide the students through the activity.* |
| **Teaching Methods/Strategies:** *The students will start in a whole group instruction to begin lesson then one-to-one interaction while students are engaged in activity to assess student findings.* | **Differentiation:***Students will be asked to create four different types of eggs with different colors of play dough. If they are unsure how to do that they will ask a teacher for help.* |
| **Materials:** Journals, pen, play dough |
| **Lesson Procedure** |
| **Anticipatory Set:** Ask the students what they know about a butterfly egg and have them write it in their journals.  |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**Have the students share what they wrote in their journals to the class to see what they already know. Teachers will then ask them questions during the activity to see if they understand the material that was taught to them. |
| **Teacher will do:****-Have students write in their journals****-We will take attendance and have the students put a check mark by their name****-Talk about the egg of a butterfly and show them some pictures****-Make sure the kids are understanding the material****-Talk about the activity and how to do it****- Take the kids through the activity****-Clean up any mess that is left****-Take the students to their correct bus** | **Student will do:****-Write in their journals****-Put a check mark by their name if they are there****-Learn about different things on butterfly eggs****-Make any comments or questions if they have any** **-Listen as the teachers go through the activity** **-Make their eggs out of the play dough****-Clean up any mess that is left****-Line up for the bus** |
| **Closure:**Talk about the different things they learned about the butterfly egg. Students will finish showing the class what they made. |
| **Reflection:** *I thought that this went good. The kids listened well and answered the questions when they were asked. I think that the kids liked playing with the play dough and making the different eggs out of it. I also think that they liked putting their own egg in the middle and comparing their egg to everybody else in the class.* |

Lesson 6

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| **Your name: Brooke, Julie, Jamee** | **Grade level: 2nd & 3rd** | **Subject: Caterpillar** | **Time frame:****45 min** |
| **Nebraska State Standard:**SC5.3.2 Students will identify variations of inherited characteristics and life cyclesSC2.3.2.b Describe how living things change as they grow |
| **Objectives:** The students will be able to* Identify what they think it the right thing for a caterpillar to eat
* Explain when the caterpillar will go into the chrysalis stage
* Identify the steps a caterpillar goes through
* Summarize different facts about caterpillars
 |
| **Assessment:** Formative assessment will happen when the students will journal every week. Teachers will then read The Very Hungry Caterpillar. We will then discuss why a caterpillar will eat so much and what is good sources of food for them. We will then have them draw a caterpillar and the right source of food. |
| **Content Knowledge:** Teachers will help students understand the difference between what a caterpillar should eat.We will talk about the steps over again as it starts in the egg and eats over a period of time as a caterpillar.Teachers will talk about how long the caterpillar is in the chrysalis. It is essential the students understand the caterpillar has to eat healthy things such as plants to grow and evolve.Teachers will show the book The Very Hungry Caterpillar as an example. |
| **Teaching Methods/Strategies:** We will use a whole group instruction. It helps the teacher relay the message to all 8-10 girls. The girls will be asked to raise their hand if they know the answer. | **Differentiation:***Students who attain more information about it will answer more questions. If they are unsure the teachers are there to assist them.* |
| **Materials:****The Very Hungry Caterpillar****Paper****Markers/Crayons** |
| **Lesson Procedure** |
| **Anticipatory Set:** We will start every lesson by them writing in their journals.The question will be, "What do you know about Caterpillars and what do you want to know?"Reading The Very Hungry Caterpillar will engage them to listen. |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)****living things change as** After reading The Very Hungry Caterpillar, this questions should be answered.* What day of the week did the egg hatch into a small caterpillar?
* Why was the caterpillar so hungry?
* Was the caterpillar eating the right kind of food to help him grow?
* How many things did he eat on Monday?
* Did he eat more or less on Tuesday?
* Why didn't the caterpillar feel well on Saturday?
* For how many weeks was the caterpillar in the cocoon? How many days is that?
 |
| **Teacher will do:*** **Have the students write in their journals**
* **Take the students to a quiet environment and read them The Very Hungry Caterpillar**
* **Ask the students questions**
* **Go back in the room and have them create a caterpillar and the food they think they should eat**
* **Assist them back to their bus**
 | **Student will do:*** **Write in their daily journals**
* **Listen to The Very Hungry Caterpillar**
* **Explain to the teachers the life of a caterpillar and the things it should eat**
* **Create a caterpillar from paper and draw the different types of food**
* **Get back on the bus**
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) The students will then show their classmates their drawings and explain what they put on their paper. |
| **Reflection:** *At the beginning of this lesson we took the kids outside to read The Very Hungry Caterpillar to the kids. I thought that they liked going outside for a little bit just to get a little fresh air and have a change in scenery. I thought that they were able to listen better too since there was little distraction outside compared to inside. I also thought that they activity after the book went well and that the kids enjoyed making their own caterpillar and what it ate on what day.* |

Lesson 7

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| **Your name:** Julie, Brooke, Jamee | **Grade level:** Second and Third | **Subject:** Science | **Time frame:**45 minutes |
| **Nebraska State Standard:** |
| **Objectives:** The students will be able to: * *Demonstrate knowledge in the life cycle by completing life cycle computer game.*
* *Practice writing the names of the stages on coloring page handout.*
* *Repeat three characteristics of the Chrysalis (Pupa) life stage to peer or teacher.*
 |
| **Assessment:** Formative assessment will be given as teacher observes students working on life cycle computer games, checks written stages on coloring page handouts and asking students to state what they know about the chrysalis life stage. |
| **Content Knowledge:** We will review previous life cycle stages; egg and caterpillar during our power point presentation and introduce the chrysalis life stage. We will review these facts about the egg: * Butterflies lay hundreds of eggs on a leaf
* Eggs come in different colors; yellow, green and white
* Eggs come in different sizes and shapes
* One caterpillar comes out of each egg.
* Before the caterpillar eats the leaf, it eats the egg shell.

We will review these facts about the caterpillar:* A caterpillar grows as it eats plants; most only eat the leaves off plants.
* A caterpillar can grow 100 times its original size.
* A caterpillar has 8 legs.
* A caterpillar sheds their skin as they grow.
* A caterpillar is an insect and is able to crawl on plants.

We will learn these facts about the chrysalis:* The caterpillar finds a leaf to attach to and then curls into a J shape
* The caterpillar sheds its skin for the last time
* Under this skin is a case that protects the caterpillar or the Pupa as it is called during this stage.
* The case hardens and then protects the caterpillar as it changes (metamorphosis) into a butterfly.
* The Chrysalis or Pupa stage lasts 9-14 days.
* The butterfly emerges with crumpled wings
* The wings stretch out over time.

 |
| **Teaching Methods/Strategies:** *We will use a power point presentation for the review and teaching of the butterfly life cycle. It is important for the students to “see” the caterpillar change into a chrysalis, metamorphosis into a butterfly and then break out of their hard shell as a butterfly. Using a large smart board will allow students a clear, large image of the power point presentation and the U-tube videos of the chrysalis stage.* | **Differentiation:***High Ability Learners will be asked to create their own life cycle instead of filling in and coloring the life cycle worksheet.**Students who have trouble focusing will be placed near the front of the classroom.* |
| **Materials: SMART board (computer lab), life cycle worksheet, markers, a computer for each student, plastic pieces representing butterfly life cycle.** |
| **Lesson Procedure** |
| **Anticipatory Set:** *We will begin our lesson writing in our journals. The students will be asked, “Please write about what you think we will use the computer lab for today.”* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**Please view power point for INPUT of material. Students will be asked before each review or introduction of stage what they remember about the egg stage and the caterpillar stage. After answers are given the page will be shown on the smart board and we will review the information. Before we introduce our new material; the chrysalis students will be asked what they think happens during this stage. We will then go over new material. We will use MODELING as we show U-Tube videos of the transformation of the caterpillar to the butterfly (the chrysalis or pupa stage). By using their sense of sight students will be able to experience first-hand what this amazing natural phenomena looks like. Our GUIDED PRACTICE will consist of computer games that review the butterfly life cycle. We will also ask students to fill out and color a worksheet that highlights each stage and what it is called.Students will be observed throughout the entire lesson (formative assessment) for UNDERSTANDING of the lesson being taught. Teacher will question students about each stage before presenting, observe students completing computer games and discuss student answers for life cycle worksheet. |
| **Teacher will do:*** **Hand out journals and ask students to write what they think will happen in the computer lab today.**
* **Work through Power Point Presentation, asking questions, giving input and leading discussions when needed.**
* **Set up student computers with appropriate games and review rules of using computers**
* **Observe student work on computers, helping and guiding when needed.**
* **Check butterfly life cycle worksheet.**
* **Question students and ask them to state characteristics about chrysalis stage.**
* **Walk students to the bus.**
 | **Student will do:*** **Write what they think will happen in the computer lab today.**
* **Participate in discussions and questioning during power point.**
* **View U-tube presentations**
* **Play computer games appropriately**
* **Fill out butterfly life cycle worksheet**
* **Verbalize with peer or teacher characteristics about the chrysalis stage.**
* **Walk quietly to the bus.**
 |
| **Closure:** Ask students what the coolest thing they learned about the chrysalis stage was. |
| **Reflection:** *During this lesson we went to the computer lab for our lesson. I thought that the kids liked learning on the computer compared to always just listening to us talk to them. I thought that they liked the activities we had on the computer and that it helped them better understand the chrysalis and the butterfly life cycle.*  |

Lesson 8

|  |  |  |  |
| --- | --- | --- | --- |
| **Your name: Brooke, Julie, Jamee** | **Grade level: 2nd & 3rd** | **Subject: Butterfly** | **Time frame:****45 min** |
| **Nebraska State Standard:**SC 5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water)SC 2.3.1.b Identify the basic needs of living things (food, water, air, space, shelter) |
| **Objectives:** The students will be able to* Identify the parts of a butterfly
* Identify what butterflies eat and the habitat it needs to be in
* Explain all the different stages of the butterfly
 |
| **Assessment:** Teachers will explain the different parts of a butterfly and their functions. They will also talk about the habitat they need be in to live. Next, we will then cut out butterflies with construction paper and make a mobile. If we have any extra time we will do a face paint activity where the teachers will draw a butterfly on the students. |
| **Content Knowledge:** Teachers will help the students understand the parts of a butterflyTeachers will explain the habitat they live inTeachers will explain the activity to the kidsTeachers will take the students through the activities |
| **Teaching Methods/Strategies:** *We will be in a whole group instruction throughout the lesson and when we enter in the activity.* | **Differentiation:***Students will be asked to make a butterfly out of construction paper. If they don’t know what to do then they can ask a teacher for help* |
| **Materials:****Construction paper****Scissors****Glue****Pipe cleaners****Markers****Face paint** |
| **Lesson Procedure** |
| **Anticipatory Set:** *The students will start off writing in their journals. They will be drawing the four stages the butterfly goes through (egg, caterpillar, chrysalis, and butterfly)* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)**Teachers will talk about the butterfly and their habitat and functions then they will ask the students questions about it. |
| **Teacher will do:*** **Have the students write in their journals**
* **Talk and show pictures about the butterfly parts and the functions**
* **Make sure the kids are understanding the material**
* **Talk about the activity and how we will be doing it**
* **Take the kids through the activity**
* **Clean up any mess that is left**
* **Ask the students to check in**
* **Take them back to the buses**
 | **Student will do:*** **Write in their daily journals**
* **Check themselves in**
* **Listen to the teachers as they talk about butterflies**
* **Ask any question during the discussion if they have any**
* **Listen to the teacher as they describe the activity**
* **Follow the teachers directions throughout the activity**
* **Get back on the bus**
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) **At the end the students who want to share their butterfly with the class will have the time to do so.** |
| **Reflection:** *I thought this was a really good lesson. I thought that the kids listened really well and answered questions we wanted them too. I thought that they really enjoyed both of the activities that we did with them. The first one was making butterflies out of construction paper. I thought that they did a good job of listening through the activity and doing what was told. The last activity was face painting. I thought that they really enjoyed the face painting of a butterfly on their face.* |

Lesson 9

|  |  |  |  |
| --- | --- | --- | --- |
| **Your name: Julie, Jamee, Brooke** | **Grade level: 2nd and 3rd grade** | **Subject: Science** | **Time frame:** **1st lesson 45 minutes****2nd lesson 45 minutes** |
| **Nebraska State Standard:**SC2.1.1.e Collect and record observations SC5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water) SC2.3.1.c Identify external parts of plants and animals SC2.3.2.b Describe how living things change as they grow  |
| **Objectives:** The students will be able to*:** Sketch and write their observations as their lima bean grows.
* Explain and label the different parts of the plant (root, stem, leaves, flower, seed)
* Identify and correctly sequence the life cycle of a lima bean (seed stage, plant stage, flowering stage, fruit stage and death stage)
* Examine the growth of a lima bean over a four week span
* Summarize the lima bean experiment including the needs of a plant (food, air, water, light, and a place to grow) to an adult or peer.

  |
| **Assessment:** Formative assessment will happen as the students’ journal each week. Summative assessment will be a quiz after the second lesson. The second lesson will occur about four weeks after the first lesson. The quiz will consist of labeling a plant and writing what each part of a plant does to help the plant grow. The student will also sequence the stages of plant growth. Students will summarize (speak) the experiment to a teacher. The teacher will fill out assessment rubric. |
| **Content Knowledge:** We will cover the functions of plant parts, the needs of plants, the characteristics of plants and their life cycle. We will discuss a plant being a live organism even though it does not per se move. What makes a plant alive? What does a plant need to grow? What are the parts of a plant? What does the stem do? The roots? The leaves? What is the life cycle of a plant and what does it look like? a) Needs (food, air, water, light, and a place to grow);b) Parts (seeds, roots, stems, leaves, blossoms, fruits); andc) Life cycle: seed stage, plant stage (growth), flower stage (budding), fruit stage, death stage (leaves falling and wilting). What other signs of dying might you see?We will compare animal life cycles to plant life cycles in lessons to follow and assess our knowledge at the end of our life cycle unit. |
| **Teaching Methods/Strategies:** *We will use whole group instruction. The small amount of girls (8-10) allows one instructor to share basic information. The students will be asked to raise their hand to answer questions, share information or give predictions. One to one interaction will occur during observations of each lima bean. A teacher will guide students to “carefully” unwrap their bean to observe growth.* *We will review material on bulletin board, growth of our lima beans and other observations students are making with the fall season happening outdoors as whole group instruction. Students will be given the quiz to take after review to assess their knowledge on Plants.*  | **Differentiation:***Students who write well will be asked to label all parts of plant. Students who are unsure of their writing will be asked to copy words from the board. Students who are unable to understand what they write will be allowed to tell a teacher what they drew and the teacher will dictate using “” what the student says.* |
| **Materials: Computer with internet access, zip lock bags, paper towels, lima beans, variety of seeds, permanent marker, water, scotch tape, pencil, journal, pictures of parts of a plant and each stage of the life cycle, markers and poster board.****Bulletin board, lima bean experiment, pencils and quiz. For enrichment activity we will have pumpkins (one already cut open), plastic tablecloth, wipes and paper towels and permanent markers. Two children will share one pumpkin.** |
| **Lesson Procedure** |
| **Anticipatory Set:** *Begin the lesson with the UTUBE video of Jack and the Beanstalk-* [*https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf\_ctSG4HfKkPq3FzmilDTQ*](https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf_ctSG4HfKkPq3FzmilDTQ)*The video will engage the students in a make believe story with the main idea being a HUGE beanstalk.**Pumpkins will be decorating the table during our review and quiz. Students will then journal about what they are going to do with the pumpkins.* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)***Question the students after the video why they thought Jack’s beanstalk grew so big? What did the beans need to grow? (light-sun, food, water, air, a place to grow) Teacher will draw these things on a poster board. This drawing will also include the parts of the plant. The girls will sequence the life cycle of a plant onto the bottom of the board working together. Teacher will then give directions (will model as gives directions) in our science experiment “growing a beanstalk.”* * Wet your paper towel
* Carefully set bean inside paper towel
* Wrap paper towel around bean
* Place bean inside zip lock bag with your name on it
* Tape lima bean to top of dry erase board (teacher)

*Each day the girls arrive for SMART class they will observe their lima bean and draw what they see. Labeling of parts they draw will be requested. Teacher will assess knowledge as they question what students are drawing, writing and observing. Teacher may also write notes in journals. Teacher will invite students to review the poster board written the first lesson.**Teacher will lead* ***Guided Practice*** *of plant growth and plant parts material. We will* ***check for understanding*** *by giving a pencil and paper quiz to the girls. After the quiz we will begin our study of the pumpkin seed, creating an enrichment activity for small insects at the zoo. The students will be provided hands on learning as they create self-designed pumpkins.* |
| **Teacher will do:*** Ask students to draw all parts of a plant in their journals
* Play the You tube video on computer
* Lead discussion about life cycle of plant (seed stage, plant stage, flowering stage, fruit stage and death stage), what makes a plant grow-needs (food, air, water, light, and a place to grow) and parts of a plant (seeds, roots, stems, leaves, blossoms, fruits)
* Draw parts of a plant and things that make a plant grow (student suggestions)
* Supervise sequencing of plant life cycle
* Demonstrate experiment while giving directions
* Supervise students
* Share lima beans that have already been cooked
* Ask students to write predictions of their lima bean.
* Lead discussion and review of plant growth and plant parts.
* Hand out and grade quiz.
* Lead discussion and pumpkin activity.
* Clean up pumpkins.
* Carve pumpkins (at a later time).
* Review what enrichment activities are and introduce service learning activity they will be participating in.
* Share store bought pumpkin seeds.
* Dismiss to the bus.
 | **Student will do:*** Draw parts of a plant they know
* Watch story on computer
* Participate in discussion about life cycle of a plant, what makes a plant grow and parts of a plant.
* Give suggestions on what teacher should draw on board
* Sequence the life cycle of a plant with the whole group.
* Listen to directions of experiment
* Participate in setting up lima bean experiment (wet paper towel, wrap lima bean, place in zip lock bag, close zip lock bag and bring to teacher)
* Taste a lima bean
* Write a prediction of what will happen to their lima bean.
* Participate in discussion and review of plant growth and plant parts.
* Take plant quiz, students may use bulletin board located in classroom.
* Participate in journal activity.
* Participate in drawing a design on their pumpkin.
* Clean up any mess.
* Participate in discussion about enrichment activities and what a service learning project entails.
* Eat pumpkin seeds (if desired).
* Walk quietly to the bus.
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) The students will then predict (write and draw) what will happen to their lima bean in their journals.Students will taste a pumpkin seed. |
|  **References:**[**http://katho3.people.wm.edu/plantunit.pdf**](http://katho3.people.wm.edu/plantunit.pdf)[**https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf\_ctSG4HfKkPq3FzmilDTQ**](https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf_ctSG4HfKkPq3FzmilDTQ)**Reflection:** *This lesson was the start to our service learning project where we made our gourds. We also did a quiz during this lesson. I thought the kids did well on their quizzes and they were learning what we were teaching them. Also, I thought that they liked decorating their gourds for the zoo for the insects that will be eating them.* |

Lesson10

|  |  |  |  |
| --- | --- | --- | --- |
| **Your name: Julie, Jamee, Brooke** | **Grade level: 2nd and 3rd grade** | **Subject: Science** | **Time frame:** **1st lesson 45 minutes****2nd lesson 45 minutes** |
| **Nebraska State Standard:**SC2.1.1.e Collect and record observations SC5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water) SC2.3.1.c Identify external parts of plants and animals SC2.3.2.b Describe how living things change as they grow  |
| **Objectives:** The students will be able to*:** Explain and label the different parts of the butterfly lifecycle.
* Identify how the butterfly started out from the beginning and the stages it goes through.
* Summarize the butterfly lifecycle and the different parts (Egg, Caterpillar, Chrysalis, Butterfly)
 |
| **Assessment:** Formative assessment will happen as the students’ journal each week. Summative assessment will be a quiz after the second lesson. The second lesson will occur about four weeks after the first lesson. The quiz will consist of labeling the parts of a butterfly lifecycle and writing about the different parts. Students will summarize (speak) the experiment to a teacher. The teacher will fill out assessment rubric. |
| **Content Knowledge:** We will cover the functions of the egg, the caterpillar, the chrysalis, and the butterfly. We will explain it is the metamorphosis process and the life cycle it goes through. We will discuss what a caterpillar eats and how long it is usually in the chrysalis. Do the eggs come in different shapes and sizes? How many legs does a caterpillar have? Where does a butterfly lay an egg? Etc.We will compare animal life cycles to plant life cycles in lessons to follow and assess our knowledge at the end of our life cycle unit. |
| **Teaching Methods/Strategies:** *We will use whole group instruction. The small amount of girls (8-10) allows one instructor to share basic information. The students will be asked to raise their hand to answer questions, share information or give predictions. One to one interaction will occur during observations of each lima bean. A teacher will guide students to “carefully” unwrap their bean to observe growth.* *Students will be given the quiz to take after review to assess their knowledge on the lifecycle.*  | **Differentiation:***Students who write well will be asked to label all parts of the lifecycle. Students who are unsure of their writing will be asked to copy words from the board. Students who are unable to understand what they write will be allowed to tell a teacher what they drew and the teacher will dictate using “” what the student says.* |
| **Materials: Students will need a pen to take the assessment. Also the Bulletin board and the quiz. For enrichment activity we will have string, cheerios, popcorn, and a plastic needle from them to put a hole in the popcorn. We will string the cheerios and popcorn through the string.** |
| **Lesson Procedure** |
| **Anticipatory Set:** *Have string, cheerios, and popcorn laid out in their spots during the review of the quiz. Students will then journal on what they think they are going to do with the materials given.* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)***Teacher will lead* Guided Practice *of the lifecycle of a butterfly and their habitat. We will* check for understanding by giving a pencil and paper quiz to the girls. After the quiz we will begin our *enrichment activity for small insects at the zoo. The students will be provided hands on learning as they string cheerios and popcorn through a string.* |
| **Teacher will do:*** Students will write in their journals.
* Lead discussion of review of the lifecycle and habitat of a butterfly.
* Hand out the quiz.
* Lead discussion of the cheerio/popcorn activity.
* Clean up any mess.
* Hand out any leftover popcorn or cheerios.
* Dismiss to the bus.
 | **Student will do:*** Draw parts of a plant they know
* Will write in their daily journals.
* Participate in the discussion and review of the lifecycle and habitat of a butterfly.
* Take butterfly quiz, which they can use the bulletin board.
* Participate in stringing the cheerios and popcorn through the string.
* Participate in the discussion about enrichment activities and what a service learning project entails.
* Eat any leftover food.
* Dismiss to the bus.
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) Students will then eat extra cheerios and popcorn. |
|  **Reflection:** *In this lesson we continued to do our service learning project. We also had another quiz for the kids. I think that the kids did alright on this quiz as well. I thought that the two kids who were there enjoyed this activity. They put cheerios and flowers on a string for the insects at the zoo for feed on.* |

Butterfly Quiz

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Identify parts of the Butterfly Lifecycle.



1. How many legs does Caterpillar have?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Where does the Butterfly lay an egg?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. After the Chrysalis stage is the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The eggs come in different shapes and sizes. **TRUE OR FALSE**
5. The butterfly has to be in a certain temperature to live. **TRUE OR FALSE**
6. List two colors of a Butterfly egg.

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List two things a Caterpillar eats.

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name/Date | 5 points | 3 points | 2 points | 0 points |
| Question 1 | Student identified 5-6 parts of the butterfly lifecycle | Student identified 3-4 parts of the butterfly lifecycle | Student identified 1-2 parts of the butterfly lifecycle | Student identified 0 parts of the butterfly lifecycle |
| Question 2-6 | Student correctly answered all 5 questions  | Student correctly answered 3-4 questions correctly | Student correctly answered 1-2 questions correctly | Student did not answer any questions correctly  |
| Question 7&8 | Student listed 2 accurate things a Caterpillar eats and the colors of a butterfly egg. | Student listed 1 accurate thing a Caterpillar eats and the colors of a butterfly egg. |  | Student listed 0 accurate things a Caterpillar eats and the colors of a butterfly egg. |

9-15 points PASSED quiz

< 8 points NEEDS MORE review on the butterfly lifecycle

Total Points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name/Date | 5 points | 3 points | 2 points | 0 points |
| Question 1 | Student identified 5-6 parts of the butterfly lifecycle | Student identified 3-4 parts of the butterfly lifecycle | Student identified 1-2 parts of the butterfly lifecycle | Student identified 0 parts of the butterfly lifecycle |
| Question 2-6 | Student correctly answered all 5 questions  | Student correctly answered 3-4 questions correctly | Student correctly answered 1-2 questions correctly | Student did not answer any questions correctly  |
| Question 7&8 | Student listed 2 accurate things a Caterpillar eats and the colors of a butterfly egg. | Student listed 1 accurate thing a Caterpillar eats and the colors of a butterfly egg. |  | Student listed 0 accurate things a Caterpillar eats and the colors of a butterfly egg. |

Total Points

9-15 points PASSED quiz

< 8 points NEEDS MORE review on the butterfly lifecycle

Lesson 11

|  |  |  |  |
| --- | --- | --- | --- |
| **Your name: Julie, Jamee, Brooke** | **Grade level: 2nd and 3rd grade** | **Subject: Science** | **Time frame: 45 Minutes** |
| **Nebraska State Standard:** SC2.1.1.e Collect and record observations SC5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water) SC2.3.1.c Identify external parts of plants and animals SC2.3.2.b Describe how living things change as they grow  |
| **Objectives:** The students will be able to*:** Explain life cycles of different animals
* Understand the order they go in
* Demonstrate knowledge of the different habitats
 |
| **Assessment:** We will use formative assessment. The teachers will see if the students are better understanding life cycles and habitats by the questions that they ask the guest speaker and also by the answer that they give. |
| **Content Knowledge:** *They guest speaker will cover life cycles of different animals and their habitats. They will have hands-on activities for the students so that they can understand things better and so that they will have a fun way to learn it.* |
| **Teaching Methods/Strategies:**  *This will be a whole group instruction. The students will be able to ask the zoo questions if they have any* | **Differentiation:***Students can ask the guest speaker questions if they don’t understand something.* |
| **Materials:** **The stringed popcorn and the gourds they made** |
| **Lesson Procedure** |
| **Anticipatory Set:** *The teachers will introduce the people from the zoo who will be talking to the girls.* |
| **Input/Modeling/Guided Practice/Check for understanding (formative assessment)** |
| **Teacher will do:*** Take the kids to the new room where the guest speaker will be
* Introduce the guest speaker
* Make sure the kids are behaving (not talking, messing around, etc)
* Help the guest speaker if they need it
* Give the kids the stuff they made for the zoo
* Have the kids give the zoo their popcorn and gourds
* Thank the zoo for coming to speak with the kids
* Help clean anything up
* Dismiss to the bus.
 | **Student will do:*** Listen to the teachers as they introduce the people and why they are there
* Listen to the speaker whose talking to them
* Ask any questions that they may have
* Give the zoo their gourds and popcorn string
* Thank the zoo for coming
* Dismiss to the bus.
 |
| **Closure:** [**View this link for ideas!**](http://edc448uri.wikispaces.com/file/view/40_ways_to_leave_a_lesson.pdf) **We will thank the visitors for coming and give them the stuff the girls made for them.** |
|  **Reflection:** *This was the last day of our service learning project with the zoo. I thought that the kids really enjoyed the zoo coming to talk to them. I thought that with all of the things that the zoo brought for the kids to look at. I thought that it helped them learn more about butterflies and other animals that go through life cycles.* |

**Bulletin Board Sketch or picture (1 per Unit)**

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**References**

[**http://katho3.people.wm.edu/plantunit.pdf**](http://katho3.people.wm.edu/plantunit.pdf)

[**https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf\_ctSG4HfKkPq3FzmilDTQ**](https://www.youtube.com/watch?v=nVJmwRSUPLQ&list=FLf_ctSG4HfKkPq3FzmilDTQ)

**Unit 1: Reflection of yourself so far…/ Unit 2: Overall overview**

I think that so far has gone well for me. I think that in the beginning I was hesitant and shy about doing things because I didn’t want to do something wrong. By the end of the semester I think that I broke out and did well about teaching and interacting with the students.