Quarter 1 Lesson Plan: Gifts of the Earth

Student: River (Age 9)

Focus: Gratitude, observation, asking questions & making predictions.

Week 1: Introduction to Gratitude and Sweetgrass

Day 1: What are Gifts of the Earth?

Materials: Braiding Sweetgrass for Young Adults by Robin Wall Kimmerer, a comfortable reading spot.

Lesson (20 min):

- 1. Introduce the theme for the quarter: "Gifts of the Earth." Ask River: "What do you think that means? What are some gifts the Earth gives us?"
- 2. Read the excerpt about Skywoman and Sweetgrass from the book. Pause to wonder together about the story.
- 3. Discuss the idea that Sweetgrass is one of the first plants, a gift to the world. How does the story make you feel about plants?

Day 2: Brainstorming Gifts

Materials: Large sheet of paper or whiteboard, markers.

Lesson (20 min):

- 1. Create a mind map with "Gifts of the Earth" in the center.
- 2. Brainstorm all the gifts River can think of—not just things we eat, but also things we experience (e.g., the smell of rain, the warmth of the sun, sturdy trees for climbing, flowers, interesting rocks).
- 3. Encourage thinking across all senses: What do we see, hear, smell, touch, and taste from the Earth? Circle the ones River feels most grateful for today.

Day 3: Creating a Gratitude Journal

Materials: A blank notebook, art supplies (markers, colored pencils, stickers, natural items like pressed leaves).

Lesson (20 min):

- 1. Explain that this journal will be a special place to notice and record the Earth's gifts.
- 2. Spend the session decorating the cover and the first page. Title it "River's Gratitude Journal" or another creative name.
- 3. Talk about how there are no rules for what goes inside—it can be words, drawings, or both. The only goal is to notice and appreciate.

Day 4: First Journal Entry

Materials: The new Gratitude Journal, pen or pencils.

- 1. Find a quiet spot, perhaps near a window or outside.
- 2. Prompt for the first entry: "Think about your day so far. What is one gift from the Earth you have seen, felt, or used today? It can be big (the sun) or small (a pebble)."
- 3. Spend 10-15 minutes writing or drawing about it. Focus on describing it and the feeling it brings. For example, "I am grateful for the smooth, grey rock I found. It feels cool in my hand and fits perfectly in my palm."

Day 5: Sharing Gratitude

Materials: Gratitude Journal.

Lesson (20 min):

- 1. Ask River if they would like to share an entry from their journal. This is always optional to create a safe space.
- 2. Discuss: "Does noticing one gift make you notice others? How does it feel to stop and think about something you are grateful for?"
- 3. End the week by looking back at the mind map from Day 2 and adding any new ideas.

Week 2: The Three Sisters Inquiry

Day 1: The Story of the Three Sisters

Materials: A children's book or online video telling the legend of the Three Sisters (Corn, Beans, and Squash).

Lesson (20 min):

- 1. Read or watch the story of the Three Sisters.
- 2. Discuss the characters: Who is the tall, strong sister? (Corn). Who is the climbing, helpful sister? (Beans). Who is the protective, shady sister? (Squash).
- 3. Talk about how they help each other. The corn provides a pole, the beans add nutrients to the soil, and the squash shades the ground to keep it moist and weed-free. They are stronger together.

Day 2: Our Scientific Question

Materials: Science notebook or a dedicated section in the Gratitude Journal.

Lesson (20 min):

- 1. Introduce the idea of an inquiry or experiment. "We are going to be scientists and plant our own Three Sisters garden."
- 2. Pose the question: "Of the three seeds—corn, bean, and squash—which one do we think will sprout from the soil first?"
- 3. Discuss possibilities. Does the size of the seed matter? Does the type of plant matter?

Day 3: Forming a Hypothesis

Materials: Science notebook, pencil.

Lesson (20 min):

1. Explain what a hypothesis is: a smart guess based on what you already know.

- 2. Guide River to write a formal hypothesis using the structure: "I predict the **[corn, bean, or squash]** seed will sprout first because **[reasoning]**."
- 3. Example reasoning: "...because it is the smallest seed and might not need as much energy," or "...because bean plants I've seen before grow very fast."

Day 4: Planting Day!

Materials: Corn, bean, and squash seeds; a large pot or a designated garden patch; soil; watering can.

Lesson (20 min):

- 1. Prepare the soil. Following the Three Sisters method, plant the corn seeds in the center. Plant the bean seeds in a circle around the corn, and the squash seeds in an outer circle.
- 2. Talk about what seeds need to start growing (water, soil, warmth).
- 3. Give the newly planted seeds their first drink of water. Offer a word of encouragement for them to grow strong!

Day 5: Creating the Garden Log

Materials: Science notebook.

Lesson (20 min):

- 1. Create the first entry in the "Three Sisters Garden Log."
- 2. Date the entry. Draw a picture of the garden pot or patch, showing where the seeds are under the soil.
- 3. Create a small chart to track observations for the coming weeks with columns for: Date, Observations, and Height (cm).

Week 3: A Closer Look at Nature

Day 1: Preparing for a Nature Walk

Materials: A small bag or basket for collecting, magnifying glass (optional).

Lesson (20 min):

- 1. Plan tomorrow's nature walk. The goal is to collect *fallen* items. Discuss why we only take things that are already on the ground (to respect the living plants).
- 2. Brainstorm what we might find: different kinds of leaves, twigs, seed pods, pebbles, feathers, bark.
- 3. "What tools might a naturalist use?" Discuss using our eyes, ears, and hands (gently!). Pack the collection bag.

Day 2: The Collection Walk

Materials: Collection bag/basket.

- 1. Go on the nature walk in a backyard, park, or trail.
- 2. Move slowly. The goal is not distance, but observation. Pause to look closely at the ground, under bushes, and around trees.

3. Collect interesting fallen items, placing them gently into the bag. Encourage collecting a variety of textures, shapes, and colors.

Day 3: Sorting and Classifying

Materials: Collected nature items, a large tray or blanket to spread them on.

Lesson (20 min):

- 1. Empty the collection bag onto the tray.
- 2. First, sort by type: all the leaves in one pile, all the rocks in another, all the twigs in a third, etc.
- 3. Now, get creative! Challenge River to re-sort the items by a different attribute. "Can you sort them by color? By texture (smooth vs. rough)? By size (tiny to large)?" This builds flexible thinking skills.

Day 4: Scientific Drawing

Materials: Science notebook, pencil, colored pencils, one favorite item from the collection, magnifying glass (optional).

Lesson (20 min):

- 1. Choose one item from the collection to observe like a scientist.
- 2. Draw it in the notebook, paying close attention to detail. Use the magnifying glass to see the tiny parts.
- 3. Label the drawing with descriptive words (adjectives). Is it bumpy, veiny, brittle, glossy, pointed? Write a short sentence about where it was found.

Day 5: Nature Art Creation

Materials: Collected items, a piece of cardboard or paper, glue (optional for a permanent piece) or just arrange for a temporary piece.

Lesson (20 min):

- 1. Use the collected natural items to create a piece of art.
- 2. It could be a collage, a mosaic, a sculpture of a creature, or a mandala pattern.
- 3. The focus is on creativity and seeing the beauty in the shapes and textures of the found objects. Take a picture of the final creation.

Week 4: Growth and Measurement

Day 1: First Garden Check-in

Materials: Three Sisters Garden Log.

- 1. Visit the Three Sisters garden. Look very closely at the soil surface.
- 2. Are there any changes? Cracks in the soil? Tiny green sprouts?
- 3. Record today's date and observations in the Garden Log. Draw any sprouts you see. If there are no sprouts, write "No visible growth yet." This is also important data!

Day 2: How to Measure a Plant

Materials: A ruler, a few different household objects (e.g., a book, a cup, a toy).

Lesson (20 min):

- 1. Introduce the ruler, pointing out the centimeter (cm) side. Explain that scientists often use the metric system.
- 2. Practice measuring. How tall is the book? How wide is the cup? Ensure River lines up the "0" at the bottom of the object.
- 3. Discuss how we would measure a tiny sprout: from the soil line to the very top tip of the plant.

Day 3: Data Collection Day

Materials: Garden Log, ruler, the Three Sisters garden.

Lesson (20 min):

- 1. Carefully observe the garden. Identify which sprout belongs to which sister (if possible).
- 2. If there are sprouts tall enough to measure, gently measure each one from the soil to its highest point.
- 3. Record the measurements in the data chart in the Garden Log. If a seed hasn't sprouted, record its height as "0 cm".

Day 4: Comparing Growth to Predictions

Materials: Garden Log with hypothesis and data chart.

Lesson (20 min):

- 1. Look at the data from yesterday. Which plant is the tallest so far? Has a clear winner emerged?
- 2. Re-read the hypothesis from Week 2. "Does our data so far support our prediction, or is it showing us something different?"
- 3. It's okay if the prediction is wrong! That's what science is all about—discovering what really happens. Discuss why the results might be different than expected.

Day 5: Garden Care

Materials: Watering can, sunshine!

Lesson (20 min):

- 1. Check the soil. Is it dry? Time to water the sisters.
- 2. Review the essential needs of plants: Soil, Water, Air, and Light (SWAL). Discuss how our garden is getting each of these things.
- 3. Make sure the pot/patch is in a spot where it will get plenty of sunlight. Thank the sun for its energy.

Week 5: The Honorable Harvest

Day 1: Learning the Rules

Materials: Braiding Sweetgrass for Young Adults.

- 1. Read the section on the Honorable Harvest.
- 2. Pause and discuss the rules or principles mentioned. List them out in a notebook. Key ideas include: ask for permission, never take the first or the last, take only what you need, use everything you take, be grateful, and share.
- 3. Ask: "Why do you think these rules are important?"

Day 2: Our Family's Harvest Code

Materials: Large paper, markers.

Lesson (20 min):

- 1. Talk about how the Honorable Harvest isn't just for plants. How can we apply it to other things? (e.g., Taking cookies from a jar, using art supplies, picking apples at an orchard).
- 2. Create a "Family Honorable Harvest Code" poster. Write down 3-4 rules that are most important to you for how you take and use things respectfully.
- 3. Decorate it and hang it somewhere visible, like on the fridge.

Day 3: The Honorable Harvest Practice Walk

Materials: Small scissors or clippers (optional, with supervision), a small bag.

Lesson (20 min):

- 1. Go on a walk with the specific goal of practicing the Honorable Harvest.
- 2. Find a plant that is abundant and safe, like dandelions or clover.
- 3. Practice the steps. Verbally ask permission. "Hello dandelions, may I please take a few of your flowers?" Look to see there are many, not just one. Take only a few.
- 4. As you take them, say thank you. Leave a "gift" in return—this could be a song, a kind word, or picking up a piece of nearby litter.

Day 4: Reflection and Use

Materials: Gratitude Journal, items harvested yesterday.

Lesson (20 min):

- 1. Take the items harvested yesterday (e.g., dandelions). Fulfill the rule of "use everything you take." Maybe this means pressing the flowers in a book, adding them to a small vase, or making a small drawing of them.
- 2. In the Gratitude Journal, reflect on the experience. "How did it feel to ask permission from a plant? What was different about this walk compared to our collection walk in Week 3?"

Day 5: Expanding the Concept

Materials: None.

- 1. Have a conversation. "Let's think of one other place we can practice the Honorable Harvest today."
- 2. Ideas: When taking a snack from the pantry (take only what you need, be grateful). When using paper for drawing (use both sides, be thankful for the tree). When asking for a parent's time (ask politely, be grateful for their attention).
- 3. The goal is to see this as a way of life, not just a nature rule.

Week 6: Deepening Gratitude

Day 1: Gratitude for Sounds

Materials: Gratitude Journal.

Lesson (20 min):

- 1. Go outside or sit by an open window for 5 minutes of guiet listening.
- 2. Try to identify as many different nature sounds as possible (wind in the leaves, bird calls, buzzing insects, rain drops).
- 3. In the journal, respond to the prompt: "Describe a sound in nature you heard today. Why are you grateful for it?"

Day 2: Gratitude for Places

Materials: Gratitude Journal, colored pencils or markers.

Lesson (20 min):

- 1. Prompt: "Think of your favorite place to be outside. It could be our garden, a park, the beach, or a forest trail."
- 2. Draw that place in the journal. Try to include details that make it special.
- 3. Write a sentence or two explaining why you are grateful for this place. How does it make you feel?

Day 3: Oral Reflection

Materials: Gratitude Journal.

Lesson (20 min):

- 1. Practice sharing gratitude out loud. Ask River to choose one entry from their journal this quarter that they feel comfortable sharing.
- 2. Have them share it with you or another family member. Practice making eye contact and speaking from the heart.
- 3. Discuss how sharing gratitude can make the feeling even stronger.

Day 4: Gratitude for the Three Sisters

Materials: Gratitude Journal, Three Sisters garden.

Lesson (20 min):

- 1. Visit the garden. Observe how the plants have grown.
- 2. Prompt: "What gifts are the Three Sisters giving us right now?" (Examples: the beauty of their leaves, the lesson of cooperation, the promise of future food, a connection to a story).
- 3. Write or draw about it in the journal.

Day 5: The Gratitude Rock

Materials: A smooth, palm-sized rock; permanent markers or paint pens.

- 1. Go on a short walk to find the perfect "gratitude rock."
- 2. Once found, decorate the rock with colors, patterns, or a word like "thanks."
- 3. Explain its purpose: Keep this rock in a pocket or on a nightstand. Whenever you see or feel it, pause and think of one thing you are grateful for. It's a physical reminder to practice gratitude.

Week 7: Sisters Together vs. Sister Alone

Day 1: A New Experiment

Materials: One extra bean seed, a small separate pot, soil.

Lesson (20 min):

- 1. Revisit the Three Sisters story. "We learned they grow best together. Let's test that!"
- 2. Propose a comparison: "What if one sister tried to grow all by herself?"
- 3. Plant the single bean seed in its own small pot. This will be our "lone sister" to compare with the "sister group" in the main garden. Label the pot clearly.

Day 2: First Comparison Measurement

Materials: Garden Log, ruler, both the main garden and the single pot.

Lesson (20 min):

- 1. Create a new data chart in the Garden Log labeled "Group vs. Lone Bean." Columns: Date, Group Bean Height (cm), Lone Bean Height (cm), Observations.
- 2. Carefully measure the height of one of the bean plants in the Three Sisters garden. Record it.
- 3. Measure the "lone sister" (it will be 0 cm for now). Record it.
- 4. Write an observation: "Today we planted the lone sister."

Day 3: Venn Diagram Comparison

Materials: Science notebook or large paper, pencil.

Lesson (20 min):

- 1. Draw a large Venn Diagram (two overlapping circles). Label one circle "Group Bean" and the other "Lone Bean." The overlapping section is for "Both."
- 2. Brainstorm what is the SAME for both plants (they are both bean seeds, get the same sun and water, are in soil). Write these in the middle.
- 3. Brainstorm what is DIFFERENT. For "Group Bean": has corn to climb, has squash for shade, shares nutrients. For "Lone Bean": has its own pot, is all alone.

Day 4: Continued Data Collection

Materials: Garden Log, ruler.

- 1. Continue the experiment. Visit both the group garden and the lone pot.
- 2. Measure the height of the group bean and the lone bean (if it has sprouted).
- 3. Record the data in the new chart. Also write a sentence of observation. Is one looking greener? Sturdier?

Day 5: Discussing Early Observations

Materials: Garden Log.

Lesson (20 min):

- 1. Look over the data chart and the Venn Diagram.
- 2. Discuss: "Based on what we know about the Three Sisters, what do we PREDICT will happen over the next few weeks? Will the lone bean be taller or shorter? Stronger or weaker? Why?"
- 3. This reinforces the concept of community and symbiotic relationships.

Week 8: Drawing Conclusions

Day 1: Final Measurements

Materials: Garden Log, ruler.

Lesson (20 min):

- 1. Announce that this is the final day of data collection for our first inquiry.
- 2. Take one last, careful measurement of all the sprouts in the main Three Sisters garden (corn, bean, and squash).
- 3. Record the data in the original Garden Log chart from Week 2.

Day 2: Analyzing the Sprouting Data

Materials: Garden Log with the hypothesis and data.

Lesson (20 min):

- 1. Look at the chart of when the seeds first sprouted. Which one was first? Which was second? Which was last?
- 2. Re-read the hypothesis from Week 2: "I predict the will sprout first because..."
- 3. Compare the prediction to the results. Ask: "Was our hypothesis supported by the data?" It's okay if it wasn't!

Day 3: Writing a Scientific Conclusion

Materials: Garden Log.

Lesson (20 min):

- 1. In the Garden Log, write a concluding paragraph using a simple structure:
- Claim: "The results showed that the [plant name] sprouted first."
- 3. Evidence: "It sprouted on [date], while the others sprouted later."
- Reasoning: "My hypothesis was [correct/incorrect]. I learned that..."

Day 4: Reflecting on the Process

Materials: None.

- 1. Have a reflective conversation about the whole inquiry.
- 2. "What was the most fun part of being a garden scientist? What was a challenge? What

surprised you the most? What new questions do you have now?"

3. This teaches that science leads to more questions, which is the exciting part of discovery.

Day 5: Planning the Project Poster

Materials: A piece of scrap paper, pencil.

Lesson (20 min):

- 1. Explain next week's final project: a poster to share everything we learned, like a real scientist at a conference.
- 2. Together, sketch a rough draft of the poster layout. Where should the title go? The hypothesis? The data chart? The conclusion? The drawings?
- 3. Decide what materials to use (e.g., poster board, markers, photos).

Week 9: Summative Project and Presentation

Day 1: Poster Part 1 - The Question

Materials: Poster board, markers, Garden Log.

Lesson (20 min):

- 1. Start the final poster. Write a clear, big title: "The Three Sisters Sprouting Inquiry."
- 2. Create a section called "My Question" and write: "Which seed will sprout first: corn, bean, or squash?"
- 3. Create another section called "My Hypothesis" and copy the prediction written in Week 2. Illustrate with drawings of the three seeds.

Day 2: Poster Part 2 - The Method and Data

Materials: Poster board, markers, ruler, Garden Log.

Lesson (20 min):

- 1. Add a section to the poster called "What I Did." Write 3-4 simple steps (e.g., 1. Planted seeds together. 2. Watered them. 3. Observed and measured.)
- 2. Carefully re-draw the data chart from the Garden Log onto the poster under a "Data" or "Results" heading. Make it neat and easy to read.

Day 3: Poster Part 3 - The Conclusion

Materials: Poster board, markers, colored pencils, photos of the plants (if taken).

Lesson (20 min):

- 1. Add the final section: "My Conclusion." Copy the conclusion paragraph from the Garden Log.
- 2. Fill the rest of the poster with detailed drawings or photos of the sprouts. Label the corn, bean, and squash plants.
- 3. Make the poster colorful and engaging.

Day 4: Presentation Practice

Materials: The finished poster.

Lesson (20 min):

- 1. Practice the oral presentation. Stand next to the poster and use it as a guide.
- 2. Walk through each section, explaining the project from start to finish. Practice speaking slowly and clearly.
- 3. Offer gentle feedback: "That was great! Remember to point to the chart when you talk about the data." Do a practice run-through.

Day 5: The Final Presentation!

Materials: The poster, an audience (family members).

- 1. Set up the poster in a presentation area.
- 2. Invite family members to be the audience.
- 3. River presents the "Three Sisters Inquiry Poster," sharing the scientific journey from question to conclusion.
- 4. Celebrate a successful quarter of learning, observation, and gratitude! Answer any questions from the audience.