Quarter 1 Lesson Plan: Gifts of the Earth

Student: River (Age 9)

Overarching Focus: Gratitude, observation, scientific inquiry (asking questions & making predictions), and the concept of reciprocity.

Week 1: Introduction to Gratitude and Sweetgrass

Materials Needed: *Braiding Sweetgrass for Young Adults* by Robin Wall Kimmerer, a new journal and pen/pencils, colored pencils or markers.

- **Day 1: What are Gifts of the Earth?**
  - **Activity (20 mins):** Begin by asking, "What do you think 'Gifts of the Earth' means?" Brainstorm a list of ideas together (sun, rain, soil, plants, food, etc.). Introduce the book *Braiding Sweetgrass for Young Adults* as your guide for this quarter. Read the introduction together, discussing any new ideas or questions that arise.
- **Day 2: Starting a Gratitude Practice**
  - **Activity (20 mins):** Introduce the concept of a Gratitude Journal. Explain that it's a place to notice and appreciate the gifts around us. Decorate the cover of the new journal. For the first entry, have River write or draw three things they are grateful for today and explain why.
- **Day 3: The Story of Skywoman**
  - **Activity (20 mins):** Read the "Skywoman Falling" section from the book. Pause to discuss the story's meaning. How does this story show the Earth being created through gifts and cooperation? Talk about the role of the animals and the woman in working together.
- **Day 4: The Lesson of Sweetgrass**
  - **Activity (20 mins):** Read the section specifically about sweetgrass. Discuss its significance as a sacred plant. What does it teach about kindness and healing? If you have access to a sweetgrass braid (or photos), observe its three-strand structure, symbolizing mind, body, and spirit.
- **Day 5: Earth-Focused Gratitude**
  - **Activity (20 mins):** Complete an entry in the Gratitude Journal with the prompt: "Describe a gift from the Earth you noticed today using all five senses." Encourage River to be specific (e.g., "the feeling of cool breeze," "the smell of damp soil," "the sight of a red cardinal"). Share and discuss the entry.

Week 2: The Three Sisters Inquiry Begins

Materials Needed: Corn, bean, and squash seeds; 3 pots or a garden plot; soil; watering can; a science notebook; markers.

- **Day 1: Who Are the Three Sisters?**
  - **Activity (20 mins):** Introduce the traditional Indigenous planting method of the Three Sisters. Read a story or watch a short, animated video explaining how corn provides a stalk for beans to climb, beans provide nitrogen for the soil, and squash shades the ground to keep weeds out and moisture in. Discuss how they help each other like a family.
- **Day 2: Asking a Question & Forming a Hypothesis**

    - **Activity (20 mins):** In the science notebook, write down the inquiry question: "Of the Three Sisters, which seed will sprout first?" Guide River to form a hypothesis, an educated guess. The sentence starter can be: "I predict the _____ seed will sprout first because _____." Encourage reasoning (e.g., seed size, prior knowledge).
- **Day 3: Planting Day!**
    - **Activity (20 mins):** Time to get hands dirty! Prepare the soil in the pots or garden. Plant the corn, bean, and squash seeds according to the package directions. Create clear labels for each plant. This is a hands-on activity focusing on care and intention.
- **Day 4: Creating a Data Chart**
    - **Activity (20 mins):** Open the science notebook. Create a chart to track the plants' progress. Columns should include: Date, Corn Observations, Bean Observations, Squash Observations, and Notes. Make the very first entry, noting "Seeds planted."
- **Day 5: First Observation**
    - **Activity (20 mins):** Gently water the seeds. Make the second entry in the observation chart. Is there any change in the soil? Any cracks appearing? Discuss the importance of patience and careful observation in science.

Week 3: A Walk for Observation and Classification

Materials Needed: A bag or basket for collecting; nature journal; pencils; magnifying glass; colored pencils.

- **Day 1: Preparing for Our Walk**
    - **Activity (20 mins):** Discuss the plan for a nature walk. The goal is to observe the environment closely. Talk about the rule for this walk: we only collect items that have already fallen to the ground (leaves, twigs, seeds, stones). This shows respect for living things. Brainstorm a list of things you might find.
- **Day 2: The Nature Walk**
    - **Activity (20 mins):** Go on the walk! Take your time. Encourage River to use all senses. What do you hear? What do you smell? Collect interesting fallen items in the bag.
- **Day 3: Sorting Our Treasures**
    - **Activity (20 mins):** Empty the collection bag. Work together to classify the items. Let River decide on the categories for sorting (e.g., by type: all leaves together, all rocks together; or by color; or by texture: rough vs. smooth). This is a foundational scientific skill.
- **Day 4: Scientific Drawing**
    - **Activity (20 mins):** River chooses 2-3 favorite items from the collection. Using the magnifying glass, observe each one closely. In the nature journal, create a detailed, scientific drawing of each item. Add labels pointing out interesting features (e.g., "veins" on a leaf, "smooth spot" on a rock).
- **Day 5: Giving Items a Story**
    - **Activity (20 mins):** Choose one of the drawn items. Write a short story or poem from its perspective. Where did it come from? What has it seen? This activity blends scientific observation with creative expression.

Week 4: Measuring Growth & Checking Predictions

Materials Needed: The Three Sisters plants; science notebook; a flexible measuring tape or ruler; pencil.

- **Day 1: Sprout Check!**

    - **Activity (20 mins):** Carefully check the Three Sisters pots/plot. Have any of the seeds sprouted? Record any and all changes in the observation chart. Celebrate the first signs of life!
- **Day 2: Introduction to Measurement**
    - **Activity (20 mins):** Once a sprout is visible, introduce how to measure its height. Demonstrate using a ruler or tape measure to find the height from the soil to the tip of the highest leaf. Add a "Height (cm)" column for each plant in the data chart and record the first measurement.
- **Day 3: Daily Data Collection**
    - **Activity (20 mins):** Water the plants. Carefully measure the height of each sprouted plant and record it in the chart. Add descriptive notes: "A second leaf appeared on the bean plant," or "The corn sprout is thick and green."
- **Day 4: Hypothesis vs. Reality**
    - **Activity (20 mins):** Look back at the hypothesis from Week 2. Did the plant River predicted would sprout first actually sprout first? Discuss the results. Reinforce the key idea: it's okay if a hypothesis is incorrect! The goal is to learn from what really happens.
- **Day 5: Visualizing the Data**
    - **Activity (20 mins):** Introduce a new way to see the data. Create a simple bar graph in the science notebook showing the current height of each of the Three Sisters. This makes it easy to compare growth at a glance.

Week 5: The Honorable Harvest

Materials Needed: *Braiding Sweetgrass for Young Adults*; nature journal; collection bag.

- **Day 1: Learning the Rules**
    - **Activity (20 mins):** Read the section on the Honorable Harvest from the book. Discuss the principles together. Write them down in the nature journal: 1. Ask permission. 2. Never take the first one. 3. Never take the last one. 4. Take only what you need. 5. Be grateful.
- **Day 2: Honorable Harvest in Practice**
    - **Activity (20 mins):** Discuss what these rules mean in a practical sense. What does it mean to "ask permission" of a plant? (It means observing, being mindful, not causing harm). Role-play asking to pick a few berries from a bush, following all the steps.
- **Day 3: The Honorable Harvest Walk**
    - **Activity (20 mins):** Go on another nature walk, this time with the specific goal of practicing the Honorable Harvest. You may not collect anything at all, or you might find a place with many dandelions and decide to take one or two for observation. The focus is on the mindset, not the collecting.
- **Day 4: Journaling the Experience**
    - **Activity (20 mins):** In the nature journal, reflect on the walk. How did it feel to think about the Honorable Harvest principles? Did it change how you saw the plants? Draw or write about one specific moment of practicing one of the rules.
- **Day 5: The Harvest in Daily Life**
    - **Activity (20 mins):** Brainstorm how the rules of the Honorable Harvest can apply to life at home. How can we practice "take only what you need" with food, water, or art supplies? How can we show gratitude for these things?

Week 6: Deepening Gratitude

Materials Needed: Gratitude Journal; colored pencils and markers.

- **Day 1: Reviewing Our Journey**
  - **Activity (20 mins):** Sit down together and read through all the previous entries in the Gratitude Journal. What patterns do you see? What kinds of things has River been most grateful for? Discuss how the practice feels so far.
- **Day 2: Gratitude for the Smallest Things**
  - **Activity (20 mins):** Today's journal prompt: "Find and describe the smallest thing in nature you are grateful for." This encourages close observation. It could be a single ant, a drop of dew, or the texture of a grain of sand. Write and/or draw it.
- **Day 3: Speaking Gratitude**
  - **Activity (20 mins):** Practice oral reflection. Sit together and take turns sharing three things you are grateful for from the day so far, explaining why each one is meaningful. This builds communication skills and reinforces the practice without writing.
- **Day 4: Gratitude for Strength**
  - **Activity (20 mins):** Introduce a more complex idea. Prompt: "Think about how plants have to be strong to grow. Write about a time you had to be strong and are grateful for what you learned." Connect personal resilience to the resilience seen in nature.
- **Day 5: Mapping Our Gratitude**
  - **Activity (20 mins):** Create a "Gratitude Web" or "Map" in the journal. In the center, write a phrase like "Gifts of the Earth." From the center, draw lines out to bubbles containing all the things discussed this quarter: The Three Sisters, sweetgrass, sun, soil, rain, collected treasures, etc. Decorate the map.

Week 7: Community vs. Individual

Materials Needed: The Three Sisters plants; science notebook; ruler; one extra pot with a single bean plant growing in it (planted around week 4 or 5 as a 'control').

- **Day 1: Observing the Community**
  - **Activity (20 mins):** Look closely at the Three Sisters growing together. How are they interacting? Is the bean starting to climb the corn? Is the squash spreading out? Sketch the "community" in the science notebook, using arrows to show how they might be helping each other.
- **Day 2: Observing the Individual**
  - **Activity (20 mins):** Now, look closely at the single bean plant growing by itself. How does it look compared to the beans in the community pot? In the science notebook, write down a hypothesis: "I predict the bean growing with the sisters will be _____ (healthier/taller/stronger) than the bean growing alone because _____."
- **Day 3: Comparative Data Collection**
  - **Activity (20 mins):** Take detailed measurements of all the plants—the sisters and the lone bean. Record height, number of leaves, and a qualitative note on 'health' (e.g., color, sturdiness of the stem).
- **Day 4: A Tale of Two Beans**
  - **Activity (20 mins):** Create a side-by-side drawing in the science journal. On the left, draw the bean plant in the Three Sisters community. On the right, draw the bean plant growing alone. Label any visible differences.
- **Day 5: Analyzing the Weekly Data**
  - **Activity (20 mins):** Look at the data from this week. Is there a measurable difference between the community bean and the lone bean yet? Discuss why community might be

important for plants, and draw parallels to human communities (family, friends).

Week 8: Drawing Conclusions

Materials Needed: Science notebook with all data; ruler; the plants.

- **Day 1: Final Measurements**
  - **Activity (20 mins):** It's time for the final data collection. Carefully take the last height measurements for all plants and record them in the chart. Add final observations about their overall health and appearance.
- **Day 2: Revisiting the First Hypothesis**
  - **Activity (20 mins):** Turn to the beginning of the inquiry in the science notebook. Read the original hypothesis about which seed would sprout first. Compare the prediction to the actual result recorded in the data chart. Discuss: "What did we learn from this?"
- **Day 3: Analyzing All the Data**
  - **Activity (20 mins):** Look at all the data as a whole. Use the charts and graphs. Which plant grew the tallest overall? Did the Three Sisters community seem to thrive more than the individual bean plant? Talk through the story the data tells.
- **Day 4: Writing a Conclusion**
  - **Activity (20 mins):** In the science notebook, write a final conclusion for the experiment. Guide River to structure it: 1. State the original question. 2. State the hypothesis. 3. Summarize the results (what actually happened). 4. Explain what was learned.
- **Day 5: New Questions**
  - **Activity (20 mins):** A good experiment always leads to new questions. Brainstorm a list of questions that came from this project. (e.g., "What would happen if we used a different kind of bean?" "How tall will the corn get?"). This shows that learning is a continuous cycle.

Week 9: Summative Project - Inquiry Poster & Presentation

Materials Needed: Large poster board; markers, crayons, or colored pencils; science journal; glue stick; ruler; (optional) printed photos of the plants at different stages.

- **Day 1: Planning the Poster**
  - **Activity (20 mins):** Lay out the poster board. Using a pencil, sketch out the sections needed to tell the story of the Three Sisters inquiry. Plan for a title, "Question," "Hypothesis," "Procedure," "Data/Observations," and "Conclusion."
- **Day 2: Writing the Content**
  - **Activity (20 mins):** Using the science journal, write out the text for each section on scrap paper first. Focus on making the sentences clear and easy to understand. This is a great time to practice summarizing information.
- **Day 3: Creating the Scientific Poster**
  - **Activity (20 mins):** Time to create the final product! Write the final text in marker on the poster. Glue on the data chart, the bar graph, and any drawings or photos. Use color and creativity to make the poster engaging and informative.
- **Day 4: Practicing the Presentation**
  - **Activity (20 mins):** With the finished poster as a visual aid, practice presenting the project from beginning to end. Stand up and explain each section out loud. Practice making eye contact and speaking clearly. Time the presentation to be about 3-5 minutes.
- **Day 5: The Great Presentation!**

- **Activity (20 mins):** Today is the celebration of learning! River gives the final presentation to family members. After the presentation, the audience can ask questions. Conclude by celebrating the hard work, curiosity, and fantastic learning that happened over the past nine weeks.