Green Thumbs Up: Preparing Your Spring Garden

Materials Needed

- Graph paper and colored markers/pencils
- A ruler or measuring tape
- Packets of seeds (vegetables or flowers)
- Seed-starting potting mix (soilless is best)
- Small containers (egg cartons, yogurt cups with holes, or peat pots)
- Spray bottle with water
- Plastic wrap or a clear lid
- Access to a window or a grow light

Learning Objectives

By the end of this lesson, you will be able to:

- Identify the three essential "ingredients" for a successful garden spot.
- Create a scale-map of a garden plot using companion planting principles.
- Demonstrate how to properly plant a seed for indoor starting.
- Explain the "Hardiness Zone" of your local area.

I. Introduction: The Garden Mystery (10 Minutes)

The Hook: Imagine you are an architect, but instead of building with wood and bricks, you are building with living things that can feed you or make your yard look like a rainbow. Right now, the seeds are "sleeping," but inside each one is a tiny "instruction manual" for a giant plant. To wake them up, we have to be ready!

Discussion Questions:

- If you were a plant, where would you want to live?
- What do you think happens to a seed when it gets its first drink of water?

II. Body: The Three Pillars of Gardening (40 Minutes)

1. I Do: The Science of "Where"

I will explain that plants are like people—they have specific "comfort zones."

- **Sunlight:** Most veggies need "Full Sun" (6-8 hours). We'll look at a map of your yard/balcony to find the sunniest spots.
- **Soil:** It's not just "dirt." It’s a home. Good soil is crumbly and full of nutrients.
- **Water:** Your garden needs to be near a hose or a place where you can easily carry water.
- **Hardiness Zones:** I will show you the USDA Hardiness Zone map. This tells us *when* it is safe to

plant outside without the frost "biting" our plants.

2. We Do: Mapping the Dream

Let’s grab our graph paper and markers. We are going to design the garden layout.

- **Scale:** Decide that 1 square on the paper equals 1 foot in real life.
- **Companion Planting:** Some plants are "Best Friends." For example, Tomatoes love Basil (it keeps pests away), and Carrots love Onions. We will look at your seed packets and group "friends" together on your map.
- **Tall vs. Short:** We’ll place tall plants (like corn or sunflowers) on the North side so they don't shade out the little guys (like lettuce).

3. You Do: The Great Awakening (Seed Starting)

Now it’s your turn to get your hands dirty! Follow these steps to start your first indoor tray:

1. **Prep the Soil:** Put your potting mix in a bowl and add a little water until it feels like a damp sponge.
2. **Fill the Containers:** Fill your egg carton or cups almost to the top. Press down *very gently*—don't pack it like a snowball!
3. **The Depth Rule:** Look at your seed packet. A good rule of thumb is to plant the seed twice as deep as it is wide. Tiny seeds just get a "dusting" of soil.
4. **The Greenhouse Effect:** Mist the top with your spray bottle, then cover it loosely with plastic wrap. This keeps the moisture in so the seed thinks it's in a warm tropical spa!
5. **Labeling:** Use a marker to write the name of the plant and the date on the container. (Trust me, you'll forget which is which in a week!)

III. Conclusion: Growth Check (10 Minutes)

Recap: We learned that a garden needs a plan, a map, and a perfect start. What are the three things every garden spot needs? (Sun, Soil, Water). Why did we put the tall plants on the North side?

The "Wait and See" Mission: Your job for the next week is to be a "Seed Detective." Check your containers every morning. The moment you see a tiny green "hook" popping out of the dirt, take the plastic cover off and move them to the sunniest window you have!

Success Criteria

- **Planning:** The student has a completed color-coded garden map.
- **Knowledge:** The student can correctly identify their local planting zone.
- **Skill:** The student has successfully planted at least three seed containers at the correct depth.

Assessment Methods

- **Formative (During):** Ask the student to explain why we don't plant seeds 5 inches deep. (Check for understanding of seed energy).
- **Summative (End):** The "Garden Pitch." Have the student "sell" you on their garden design, explaining why they chose certain spots for certain plants.

Adaptations & Extensions

- **For More Challenge:** Calculate the "Days to Harvest" on the seed packets and create a calendar showing exactly when you will be eating your first home-grown salad.
- **For More Support:** Use a "square foot gardening" template where the student only has to decide which plant goes in a pre-drawn 12x12 inch box.
- **Multi-Sensory:** Set up a "Soil Exploration" station where the student feels the difference between sand, clay, and potting mix with their eyes closed.