Session 2: Jack's Garden

Program Outline

A. Gathering Activity KWL Sheet - Living Things (10 min.)
B. Welcome back (5 min.)
C. Reading ***Jack's Garden*** (15 min.)
D. Hands-on Horticulture activities: Watering Bottle (10 min.) and Plant Labels (15 min.)
E. Wrap up (5 min.)

Extra Advance Preparations:

Sow a variety of seeds in one container ahead of time. Sow at least 4 weeks prior to this session. (The idea is to show differences in leaf shapes.) Prepunch holes in the water bottle lids.

Supplies:

- Sign-in sheets
- Name tags
- ***KWL Sheet*** from Session 1 & new ***KWL Sheet*** for Session 2
- Insect photos or specimens in an opaque box
- Pencils, markers, crayons
- Copy of ***Jack's Garden*** storybook
- Disposable tablecloths or cut garbage bags for work tables
- Hammer
- Construction paper
- Labels
- Nail or awl for piercing plastic lids
- Wide-mouth, 20-oz, heavy plastic beverage bottle (i.e., sports drink or fruit juice bottle) for each participant, rinsed and empty
- Block of wood
- A mixture of plant tags and materials, including purchased and home-made
- A pot that contains a mixture of unlabeled seedlings: mixture of monocot, (corn, grass) and dicot (zinnia, tomato, carrot)
- Potted plant with a plant tag
- Permanent marker or pencil (Sharpies, grease pencils, #2 pencils, etc.)
- Mixture of materials to use in making plant tags. Materials to consider are craft sticks, recycled window blind slats, rocks, clothespins, tags cut from recycled plastics such as milk jugs, yogurt containers. Participants should be able to write on them.)
- Trash bags
- Hand whisk broom and dustpan
- ***My SPROUTS Journal*** folder or notebook
- Copies of take-home sheet 2 (***Where I Live and Play: Insects and Other Living Things***)
- Copies of ***Grow On!*** for Session 2

MG SPROUTS
Horticulture Activities for Kids

Jack's Garden by Henry Cole

Harper Collins Children's Books, ©1995, ISBN: 978-0688152833. "This is the garden that Jack planted..." Based on the familiar rhyme story about the house that Jack built, this beautifully illustrated book follows Jack through the building of a garden.

Themes: Soil, weather, insects, life cycles, interdependence of living things.

BIG Idea: Plants grow in a natural and complex world filled with diversity.

Reading Vocabulary

sprouted

seedlings

blossomed

A. Gathering Activity: KWL Sheet – Living Things (15 minutes)

Have one volunteer at the sign-in table to greet participants and parents, and help fill out name tags. Have the volunteer collect any journal sheets as participants check in. Hand out the KWL sheets saved from the last session on sunflowers, returning each sheet to its respective owner. Have participants take a few minutes to finish the final section, "L-learned." When they have completed that section, collect those sheets and give them the new sheet for Session 2. At each table, have some insect photos or specimens in an opaque box. Open the box when the participants begin working on the K & W sections of Session 2 sheet. Allow children about 10 minutes to work. Encourage wonder and curiosity. Ask prompting questions as they work, such as *What do you wonder about the insects (or other items) you see there?* If the children are not yet writing, have volunteers assist by taking dictation or encourage the children to draw pictures.

B. Welcome Back (5 minutes)

Welcome back to MG Sprouts. Take a moment to introduce yourself and the other volunteers again to parents and participants. Discuss last week's book and activities. *Last week, we talked about Sunflower House.* Hold up a take-home sheet and ask if anyone found interesting things to write on their take-home sheet about seeds and flowers. Talk about this week's book, ***Jack's Garden***, and group activities.

Keep alert for helpfulness, generosity, kindness, and other good things participants do and say. Use their names often as you acknowledge their responses to questions and discussion. Hearing their own name in a positive way in the group setting helps the child establish belonging and encourages good group behaviors.

C. Reading Aloud: Jack's Garden (15 minutes)

Story Summary: This is the garden that Jack built. Introduce the book and set the stage for what's going to happen in the book. Set the stage for listening by asking an "I wonder" statement based on the cover illustration. Start introducing the BIG Idea concept by pointing out all of the different creatures and plants on the cover. Read the title and author's name. Encourage the children to comment and predict what will happen in the story. The text is fairly short, so take time to pause and point out the seasons, the weather, and compare back to last week's book which helps participants make connections to what they already know.

Read the book aloud pausing briefly along the way to discuss the book with the group. Conclude the reading with a short discussion about the book. Some questions you might ask to spur discussion are:

- *What were the things that the plants in Jack's garden needed to grow?*
- *What kinds of things were in the soil in Jack's garden?*
- *What did Jack plant in his garden?*
- *How did the seeds in Jack's garden get watered?*
- *What kinds of creatures lived in Jack's garden?*
- *What might happen next in Jack's garden?*

D. Hands-on Horticulture: Watering Bottles and Plant Tags (20 minutes)

Hands-On Horticulture: Making Watering Bottles 10 minutes
Remember from last week that plants come from seeds and seeds come from flowers? The seeds and plants in Jack's garden were watered by the rain, but rain doesn't always fall where and when the plants need it. Sometimes we need to provide our seeds and plants with a gentle supply of water, so we are going to make our own watering bottles. We will use recycled drink bottles, keeping trash out of the landfill and using our resources wisely.
MATERIALS • Hammer • Nail or awl for piercing plastic lids • Wide-mouth, 20-oz, heavy plastic beverage bottle (i.e., sports drink or fruit juice bottle) for each participant, rinsed and empty • Block of wood

BEFORE session: Prepare the lids.	Remove the lid from the bottle. Place lid upside down on a block of wood or other surface that won't be damaged. Use the hammer and nail to perforate the lid of the beverage bottle. Put at least 10-12 holes in the lid, spread evenly over the lid.
	Give each child a bottle and its perforated lid.
IN SESSION	
1. Prepare a label.	*We are going to cut a piece of paper that will wrap around the bottle with enough overlap to glue or tape together. Our table leaders can help us mark where we should cut the paper for our label. Then we will use crayons to put our name and maybe a bit of decoration on the label for our bottle. Finally, we will attach the label to a bottle with tape or glue.*
2. Fill bottle.	Assist each child with filling his/her bottle with just enough water for the planned activity. Don't fill the bottles.
3. Replace cap.	Assist participants with replacing the cap on each bottle. Demonstrate sprinkling plants or seedlings with the bottles. *Here's how we will use our bottle to water our plants. We want to be careful not to squeeze water all over since we are guests using this room and we would like to be invited back.* Use over a spare plastic lid, box, or trash can to collect drips.

Hands-On Horticulture: Making Plant Tags 10 minutes	
Plant tags are an important part of sowing seeds and planting new plants. Remember that word "sow" from last session? "Sow" means to plant seeds. We will be planting several things in the coming units, so we want to make a ready supply of plant labels to be used in future sessions.	
MATERIALS • Seed packages from Session 1 • A mixture of plant tags and materials, including purchased and home-made • A pot that contains a mixture of unlabeled seedlings (sow seeds ahead of time to show differences in leaf shapes) • Potted plant with a plant tag • Permanent marker or pencil (Sharpies, grease pencils, #2 pencils, etc.) • Mixture of materials to use in making plant tags (should be able to write on them)	
Activity Discussion	*Our BIG Idea for this session is that plants grow in a world that is full of diversity. Diversity means different. Do you remember all of the different things that lived in Jack's garden? (*Birds, bees, butterflies, beetles, spiders, worms, etc.) *What about the plants? Jack had a lot of different plants in his garden, didn't he? He sowed seeds in his garden, and the seeds grew into many different plants. Can you count how many different kinds of plants Jack grew in his garden?* (Turn to the next-to-last page that reads "And this is the garden that Jack planted." Have children count the different plants. Talk about what they see. Have them describe the seedlings.)

	Do you think you would know which ones are which when they are little tiny seedlings? (Show the children a pot that contains a mixture of unlabeled seedlings OR turn to the page in ***Jack's Garden*** that says "These are the seedlings that sprouted with the rain that wet the seeds that fell on the soil that made up the garden that Jack planted." Ask the children if they know which seedlings are tomatoes or carrots or coreopsis or poppy or sunflower, etc.)
1. Information to include on a plant tag	*When we work with plants, it is important to keep track of what they are and when we planted them. Remember the part in* ***Jack's Garden*** *when he planted the seeds and put the seed packages on sticks to use as plant tags? That's not a bad idea but sometimes you might need to make your own tag.* (Hold up some potted plants with tags.)
	What else might we want to write on our plant tags? I like to remember the DATE that I planted the seeds. This helps me know how long I should wait to see the baby seedlings. If the seedlings don't show up within a week or so, I know there might be a problem. I might need to replant those seeds.
	If I plant more than one kind of seed or more than one kind of the same seed, I want to remember the NAME of each. I like to grow zinnias. I want to keep the yellow ones together, and put the red ones in a different part of my garden. Using a plant tag helps me keep track of which ones are yellow and which ones are red. I'd make a tag that read "Zinnia – RED" or "Zinnia – YELLOW."
	In our sessions together, there are lots of you. We want to keep track of who planted what, so putting YOUR NAME on plant labels is important, too!
2. Hold up or put on a table some samples of different kinds of plant tags. • pre-made ceramic markers for common plants, such as popular herbs and vegetables • metal tags	*We can use all kinds of things to label our plants. (Hold up sample plant tags.) We can use plastic, metal, wood. Can you think of some other things?*
	Some types of plant tags work better, depending on what we are doing. For example, if I sow a bunch of different tomatoes and peppers in the springtime, getting ready for the vegetable garden, I might sow the seeds in one flat. I might forget which is which -- that would be a REAL problem if some of those peppers were HOT peppers! We might use a skinny tag (hold up a classic plastic plant tag) so that we can insert several tags in a small space, like a seed flat.
	When we work in the garden, we might use the tags that come with the plants that we buy (hold up a commercially-printed plant tag) to mark where things are planted in the garden and remember what the plants are. We might buy some fancy tags that we see at the garden center.

3. Plant tags can be simple and homemade • ice cream sticks or tongue depressors • window blinds • recycled lids • jar lids on a stick • painted rocks • old spoons	*You don't have to spend money for plant tags. They can be made of simple, low- or no-cost materials. Ice cream sticks make great plant tags, especially the wide paddle ones we use to eat a cup of ice cream! I might have an old window blind at my house. These are great for making into a plant tag. I can use my permanent magic marker and write on the plastic the name of my plant.*
	S*ometimes, I have the space in my garden to use painted rocks as plant labels. I might paint the letters on a rock or brick and place it next to the plant or where it is planted*.
	We want to make sure that our plant labels are water-proof. They'll get wet when we water our plants, and we don't want our labels to wash off or fall apart.
	We're going to be planting lots of things together. So, we want to practice making some plant labels so that we can keep track of what we grow. Let's make some plant tags.
	First, choose a material to use for your plant label. (Let children choose from several different materials. Offer popsicle sticks, sections of window blinds, pre-cut pieces of plastic containers, jar lids, etc. Make sure there are no sharp edges.)
4. Make first one for last session	*Choose something to write with, either a pencil or a permanent marker.* *On the back of your label, write your name. (First name is fine unless there are duplicates.)* *On the front of the label, write COSMOS.* *We made seed tapes for these last time. Did you plant them yet? If you did, write down the date when you planted them.* *Look! You've made a plant label! Great job*!
5. Make a second one for next session	*Choose another label.* *On the back of your label, write your name.* *On the front of the label, write GARLIC. We'll plant these at a later session, so let's put the date of* _____ *on the label.* *Great job! You've got your label ready for next time! Let's put them in our supply box for when we get back together again.*
6. Clean up	

Modifications and Tips	
TIME AND/OR ABILITY	LESS
Making Plant Tags	Young students may: • Draw a picture of each plant instead of writing the word. Make sure the plant label is large enough to accommodate a child's picture. • Draw a picture on a printed "seed label" template • Need much wider seed labels to accommodate their larger and less precise handwriting. • Need reminders about using permanent markers and/or something to protect clothing or other surface.
TIME AND/OR ABILITY	MORE
Watering Bottles	Advanced: For advanced students take a moment to teach/demonstrate how to know you have watered an appropriate amount. For example, *In an outdoor potted plant, water just until water begins to come out the bottom;* or *If you pick up the soil and squeeze it, the soil should form a ball; if water seeps through your fingers, it is too wet, if the soil ball crumbles, it is too dry.*

E. Wrap Up (5 minutes)

Wrap up the session with a quick summary of the day's activities. The discussion might go something like this: *Today we finished our KWL sheet about seeds and sunflowers. Does anyone want to share something from their Sunflower Seeds KWL sheet or their journal take-home sheet on seeds and flowers?* (Briefly discuss.) *Today we started a new KWL sheet about insects and living things we might find in the garden. Then we talked about how plants grow in a world that is full of diversity. Who remembers what diversity means? Different, right?. We read* ***Jack's Garden****. Remember in Jack's garden that there were many different plants, insects and birds. Does anyone remember the names of some of those different plants? (Buttercup, Dianthus, Poppy, Purple Coneflower.) What about the insects in Jack's garden? (Green June Beetle, Sulfur Butterfly, 7-spotted Ladybird Beetle)*

Next week, we will finish up our KWL sheet about insects and start a new one. We made our own water bottles and plant tags today, too. Take a moment to remind them about their journal take-home sheets. Ask participants to share where they might look for insects or other living things. Ask them to make observations about what they see and record them on the take-home sheet. They may bring them back to the next session to share with the group and add to their journal. Remind them that they may write, draw pictures or both, and they can fill out the KWL section with what they learned in the SPROUTS session and at home afterward. Encourage participants to use the extra pages to record anything they see growing in gardens or in the places they visit.

Next week we will talk about Compost Stew.

Children go home with: ***My SPROUTS Journal*** take-home sheet 2 (***Where I Live and Play: Insects and Other Living Things***), ***Grow On!*** for Session 2.

Session 2 Notes:

Review

Next week

For follow up