

Turn and Chat

- Share one memory from your childhood where you discovered or learned something about growing, farming or gardening
- What helped this lesson to stick in your mind?



Garden Curriculum

- Social/Emotional
- Music/Movement/Dramatic play
- Art
- Language/Literacy
- Math
- Science
- Fine and Gross motor



Social/Emotional in the garden

- Sit spots
- Teamwork aspect (planting, caring for, harvesting, eating!)
- Classroom pride (having a garden space dedicated to 1 class)
- Responsibility, weekly care jobs, ect...
- Garden rituals, like songs, visits, greetings.



Music, Movement and Dramatic Play

- Sound maps
- Garden Yoga
- Veggie-offs
- Build a plant
- Soundscapes (benefit of deterring pests)
- Songs and fingerplays. Even little songs to encourage plants to grow





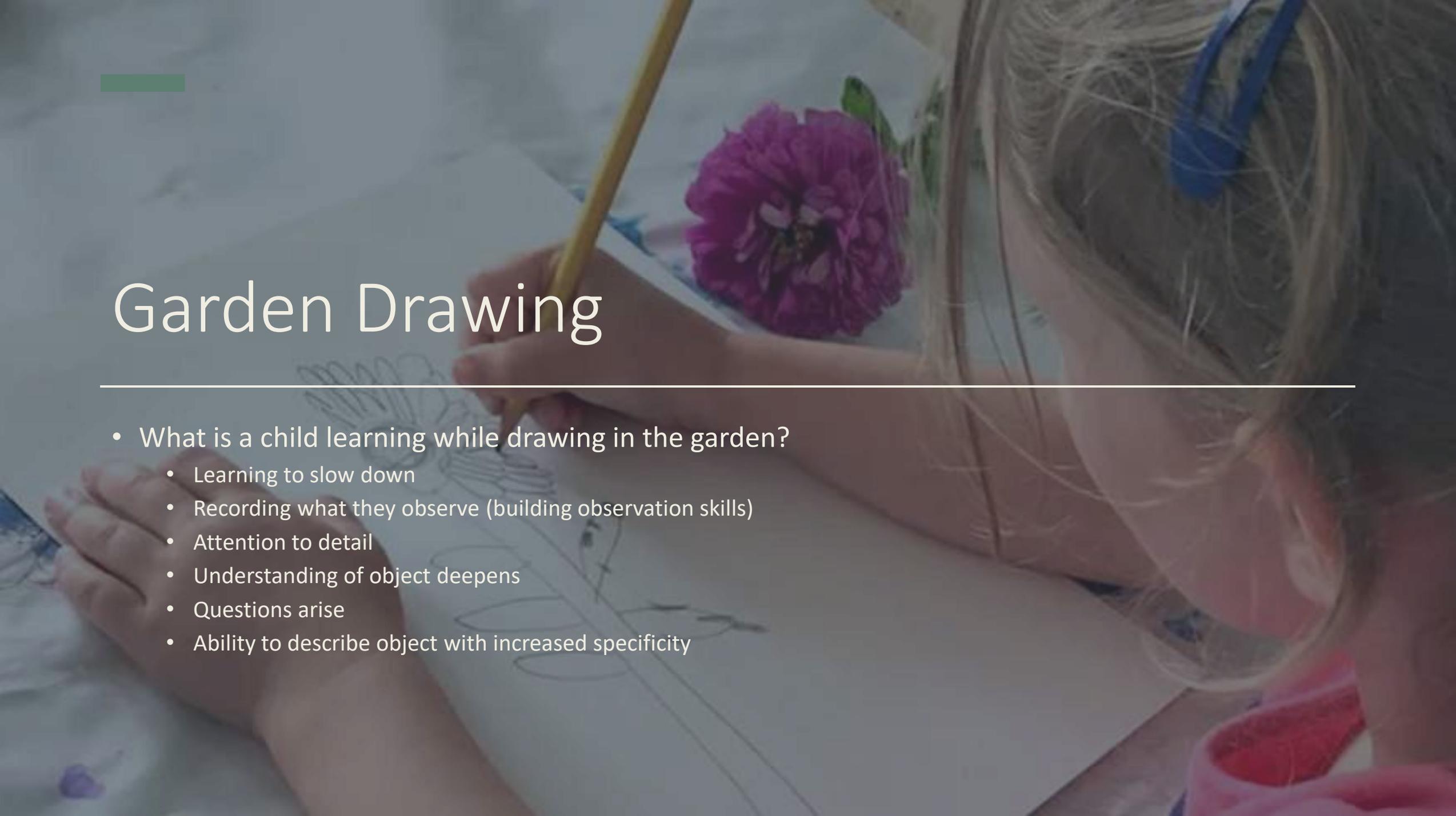
Dress a Bean Plant video



Art in the Garden

- Planning a dream garden
- Color search/Shape search
- Observational drawings
- Flower pressing
- Nature Circles
- Still life/watercolors, oil pastels, color pencils.
- Anti-pest decorations



A child with blonde hair tied back is sitting at a table outdoors, drawing a flower on a piece of paper. The child is holding a yellow pencil and is focused on their work. A real purple flower is placed on the paper next to the drawing. The background is a soft-focus garden scene.

Garden Drawing

- What is a child learning while drawing in the garden?
 - Learning to slow down
 - Recording what they observe (building observation skills)
 - Attention to detail
 - Understanding of object deepens
 - Questions arise
 - Ability to describe object with increased specificity



Garden Drawings

- If you are able to, go outdoors, sit by a window, or find a garden 'inspired' muse (fruit or vegetables from your fridge, bouquet of flowers or house plant, even a photo or painting of a garden)
- Spend time drawing or representing what you see in some way.
- Your art can be representative, prose, poetic, abstract or whatever you are moved to create.

Museum! Show and Share

- What did you like best about this activity?
- What was hard about it?
- What skills did you use when you were drawing vs. when you were observing?
- How might you change this activity with students?





Language and Literacy in the Garden

- ABC garden
- Parts of a plant
- I notice, I wonder/descriptive language
- Creative writing
- Food memories
- So much literature around garden and growing!

Children's literature around farm to school

Important topics include:

- Gardening, farming, livestock, wool/sheering, eggs, bees
- Cooking, especially cultural foods, multi-generational, canning and preserving
- Farming/growing/fishing/harvesting as a way of reducing food insecurity
- Picky eaters, children's reactions to other children's food or dietary practices



classici

Il piccolo principe

6-10 anni

Il piccolo principe

Me, Mum & Mista

Bronte

classici

6-10 anni

A pair of black-rimmed glasses is resting on an open book. The book has a red bookmark. The background is blurred, showing a wooden surface and a blue object.

Book review

- In your chat, share the title of the farm-based book you brought.
- What do you like (or not like) about it?
- How might you use this book to teach a farm to EC lesson in your class?

A few book ideas...

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- **Gardening, bee keeping, livestock, wool-** The Beeman by Laurie Krebs, Feeding the Sheep by Leda Schubert, Tops and bottoms by Janet Stevens, Errol's Garden by Gillian Hibbs
 - **Children's responses to other's culture around food-** Yoko by Rosemary Wells, Lilah's Lunchbox by Reem Faruqi, A Normal Pig by K-Fai Steele, Everybody Cooks Rice by Norah Dooley, The Ugly Vegetables by Grace Lin
 - **Food insecurity-** Watercress by Andrea Wang, A Different Pond, by Bao Phi.
 - **Food preserving-** Blueberries for Sal by Robert McCloskey, Tomatoes for Neela by Padma Lakshmi
 - **Community cooking-** Mama's Panya's Pancakes by Mary and Rich Chamberlin, Dumpling Day by Meera Sriram, Fry Bread by Kevin Noble Maillard.
 - **Picky eaters-** Bread and Jam for Frances by Russel Hoban, Gregory the Terrible Eater by Mitchell Sharmat, Princess Penelopea Hates Peas by Susan D. Sweet and Brenda S. Miles.

Math in the Garden

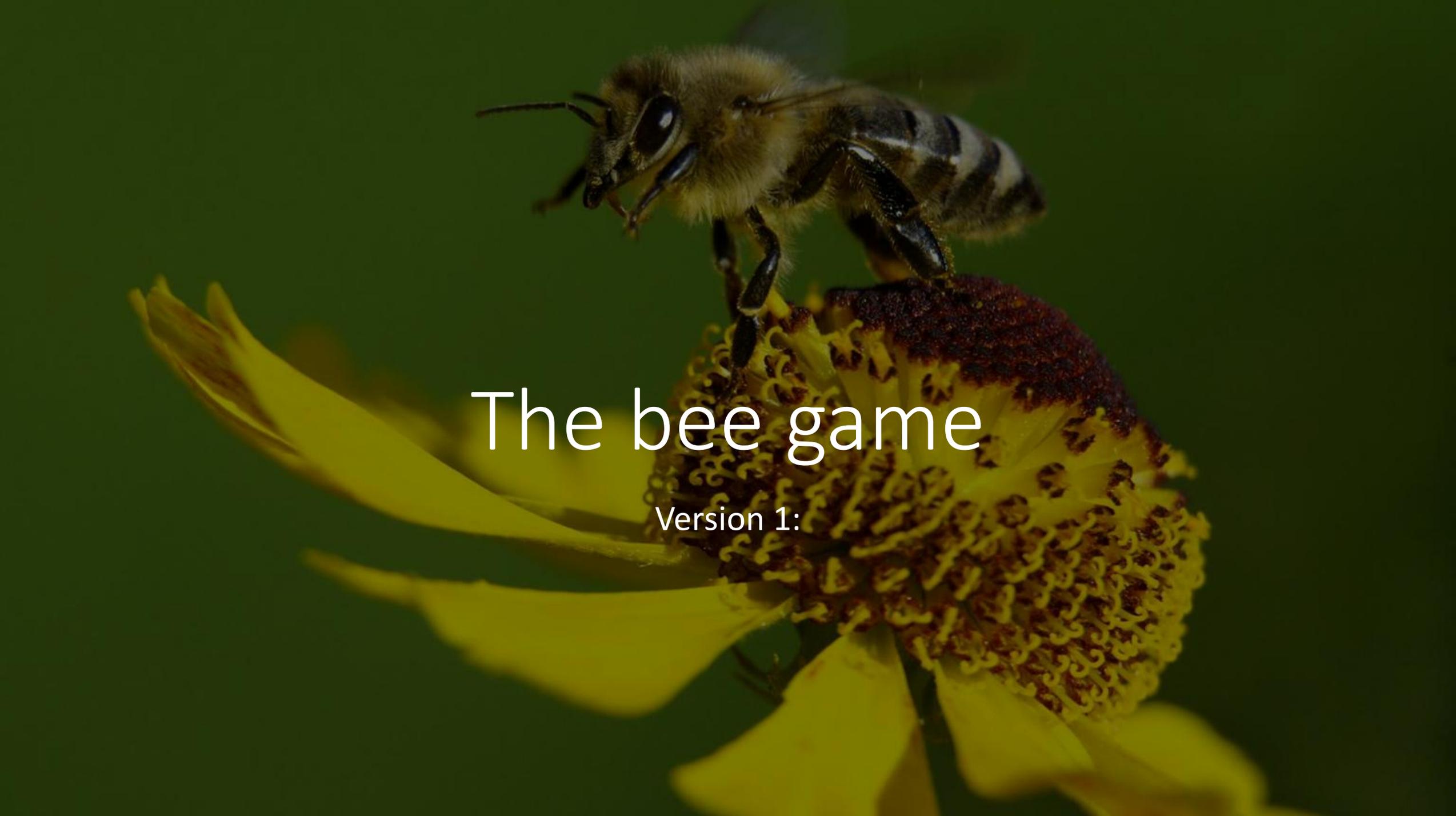
- Seed Olympics- who sprouts first, who grows the fastest? Who is the tallest or widest? Who is first to bloom or produce?
- Square foot gardening
- Garden mapping
- Seed/lings planting- how far apart, thinning, ect.
- Sequencing
- Sorting
- Cooking!

Garden Olympics

Tallest plant	Widest Leaves	Most flowers
Most Productive	Most Leaves	Largest Flowers
Most Fragrant	Most Colorful	Appeals to the most senses

Science in the Garden

- I notice, I wonder
- Plant partners- who helps whom?
- Bug hunts
- What part of the plant are we eating?
- Predictions- Go well with seed Olympics
- Pollination
- What else is grown/raised on a farm?

A close-up photograph of a honeybee on a yellow flower head. The bee is positioned at the top of the frame, facing left, with its legs and antennae clearly visible. The flower head is a vibrant yellow with a dark brown center. The background is a soft, out-of-focus green. The text 'The bee game' is overlaid in white, centered on the flower head.

The bee game

Version 1:

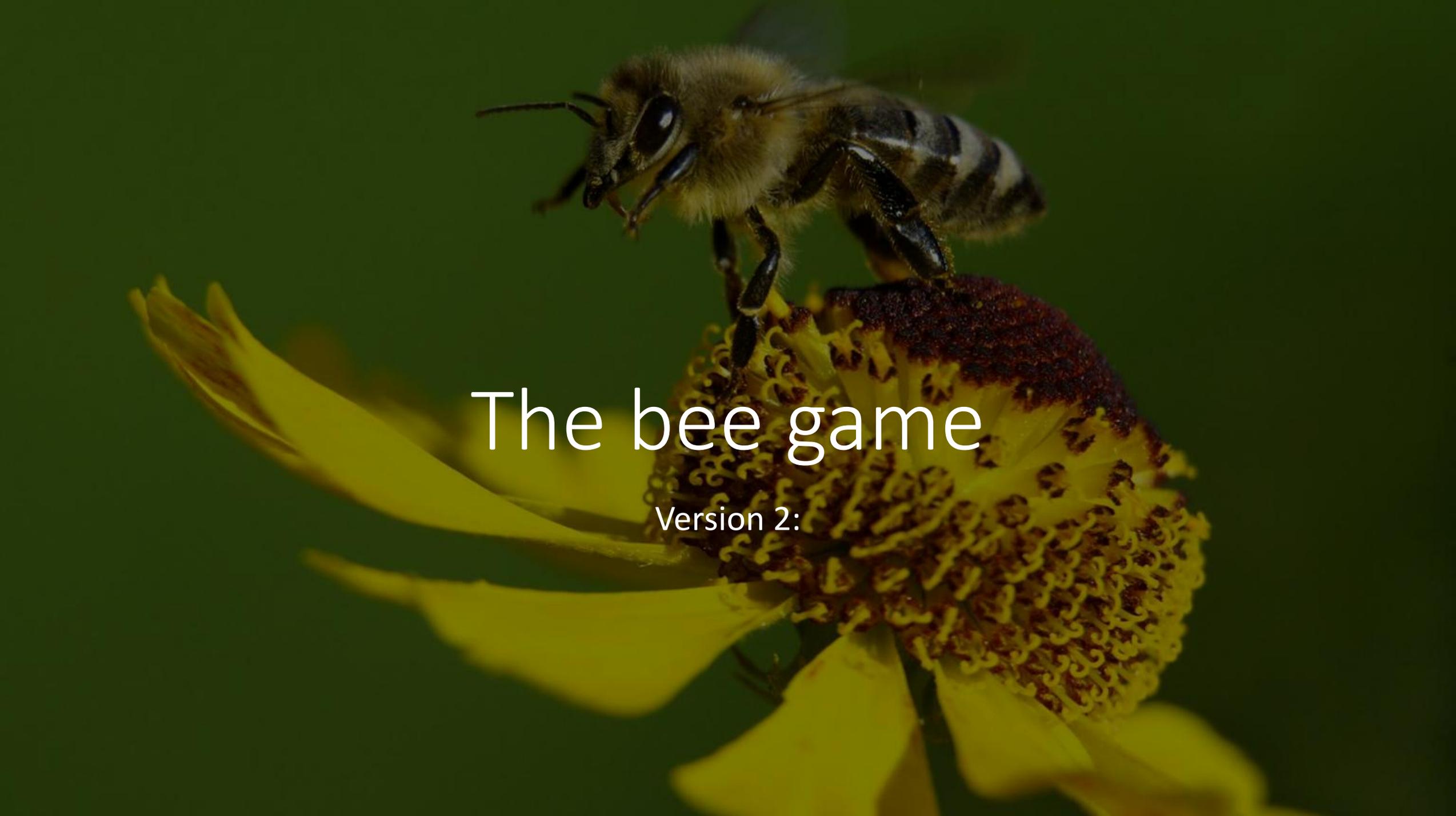
The bee game: version 1

- Works well for younger children.
- Can be done inside and outside.
- Children learn that bees 'pollinate' by moving bits of pollen from one flower to another. That is what enables a fruit to grow!
- Can also add in a 'bee dance' element for older children.

The Pollination game

- Can be follow the leader style or free-for all.
- Children are bees. They fly to a 'flower', wiggle their behinds ('Waggle dance'), then pick up a pom-pom.
- When they get to another flower, they trade pompoms, wiggle their behinds again, and keep going.
- In this way, they pollinate the flowers, and communicate to other bees where the food is.



A close-up photograph of a honeybee on a yellow flower. The bee is positioned in the upper right quadrant, facing left. It has a fuzzy thorax and a striped abdomen. The flower is in the lower half of the frame, with its bright yellow petals and dark brown center visible. The background is a solid, dark green color. Overlaid on the image is the text 'The bee game' in a white, sans-serif font, centered horizontally. Below it, in a smaller font, is the text 'Version 2:'.

The bee game

Version 2:

The Bee game: version 2

- Works better for older children.
- Teaches about how bees function together as a hive.
- Each child is assigned a different bee job.
 - Queen- lays eggs (bingo marker on paper)
 - Scouts- search out flowers, come back to hive and 'dance'
 - Guards- sniff each returning bee before allowing them into the hive
 - Nurses- feed the baby bee larva
 - Drones- do whatever they like!

The Bee Game- Fine Motor Activity

- Using paper or cardstock, make a bee shape and decorate.
- Tape a Q-tip perpendicular across the body of the bee. The tips are the 'pollen baskets' on the bee's knees.
- With real flowers (or fake ones with some sort of powdered color like cumin or saffron), gently rub the q-tip inside the flower.
- Now move to another flower and do the same.
- You just pollinated a flower!



Gross Motor in the Garden

- Act out a seed sprouting
- Pollination games
- Garden yoga
- Seed tag
- Harvesting, preparing garden beds, weeding, planting, and putting beds to rest
- Hauling water and composting
- Gardening is active, physical work!





Building a Sugar Maple Tree

Heartwood-Non-living center of trunk, gives tree strength and structure.

Sapwood-where the Xylem and Phloem are, transport water from the roots and sugar from the leaves.

Bark- protects the tree from injury and disease.

Leaves-Use water and energy from the sun to make sugar to feed the tree.

Roots-suck up the water from the ground and store extra sugar from the tree.



Beyond the Garden-more farm topics

- Maple sugaring
- Honey and bee keeping
- Wool craft and felting
- Other Fiber arts
(angora, Cashmere, alpaca,
hemp and more)
- Grains and baking
- Meat, dairy and eggs

More Resources for Farm to ECE

- Seed and seedling donations from local greenhouses
- Discount or donated lumber for garden beds
- Agriculture students, local beekeepers, local agriculture schools, 4-H, Eagle scout projects, grocery stores, etc...
- Local farms, farmers markets or grocery stores might donate unsold products.
- Farm to school programs with online resources: Shelburne Farm, Island Grown Schools, Growing Minds



Mass Audubon resources for early educators

- Nature and garden PD series
- Customized professional trainings
- Site-visits (can be virtual)
- Curriculum consulting/coaching
- SEEDS program
- Quarterly early ed newsletter
- Free online resources on our website
 - 4 Nature-based STEM units-Available in English and Spanish.
 - Young Explorers
 - Nature Bingo
 - Nature Play Videos



Thank you!



Thoughts, Questions, Comments

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Development Survey

