



Who Are We?









Thread: WHO ARE WE?

Who Are We? guides children to discover how who we are builds and shapes our communities and ecosystems. Through this exploration of the diversity of the human and natural world, young children will examine who they are and what they see. By considering the questions, “Who am I? Who are you?” and “Who are we?” children develop empathy, the ability to understand multiple perspectives, and an awareness of themselves and the world around them. They’ll observe patterns, make observations, sort and classify, and consider how differences contribute to healthy and fair communities.



-  **Diversity:** All systems and places function because of variety.
-  **Fairness / Equity:** Organisms must share resources to meet the needs of living things equally, across places and generations.

Enduring Understandings

-  Each living thing is unique and special.
-  Each living thing belongs to a community, and is part of different groups within a community.
-  Every living thing has intrinsic value.
-  Every living thing contributes to its community and groups.
-  Living things have different needs and meet them in different ways.
-  Healthy communities and systems require diversity.
-  Every living thing experiences the world differently.
-  All living things share similarities and have differences.

See p.18 for the **Goals of Anti-bias Education** as described by Louise Derman-Sparks and Julie Olsen Edwards.

Dear Families,

We are so excited to be embarking on an exploration of **Who Are We?** We wanted to share our plans with you so that you might discuss what we are learning with your child.

Our goal is to help your child develop an understanding of and appreciation for how our similarities and differences create healthy communities and ecosystems. We will be exploring the questions *Who am I? Who are you?* and *Who are we?* to help your child develop self-awareness and empathy for other people and living things, as well as understanding of **diversity** and fairness (**or equity**). Children will come to understand the following:

- Each living thing is unique and special.
- Each living thing belongs to a community and is part of different groups within a community.
- Every living thing has intrinsic value.
- Every living thing contributes to its community and groups.
- Living things have different needs and meet them in different ways.
- Healthy communities and systems require diversity.
- Every living thing experiences the world differently.
- All living things share similarities and have differences.

To support this learning at home, talk with your child about your family culture and traditions. Share family history with your child. Talk about what makes your family unique and special, as well as what makes your family similar to other families. Encourage your child to explore and discover themselves and others.

Thank you!

WHAT'S the "BIG IDEA?"

Diversity: All systems and places function because of variety.

Fairness / Equity: Organisms must share resources to meet the needs of living things equally, across places and generations.

Connecting beyond the Classroom



Family Connections

To connect families with *Who Are We?* post a large calendar in a visible area that families have access to and invite families to post events that are important to them, including religious and cultural celebrations. Learn about these events and invite families to come in to share their traditions and celebrations with the children. Ask each family to send in family photos (offer to lend a digital camera) and display the photos in the classroom, giving each child the opportunity to see their loved ones in their classroom. Consider creating a community map, on which each child can identify his or her home. You might ask families to send in a favorite family recipe, invite family members to come prepare their recipes with your class, or host a classroom potluck.



Community Connections

To support *Who Are We?*, reach out to community organizations that do social justice work. These might include organizations that deal with childhood health and nutrition, hunger and homelessness, public health, adult education, or environmental justice. Get to know these organizations and what they offer to the community. Provide multiple opportunities for children to explore who and what is in their community, both natural and built. Help children learn about and become familiar with shared community resources like the library, playgrounds, or pool. Children can get library cards, learn where to play, or find other ways to engage with what the community has to offer. Connect with your local municipal government to learn about the work that they do. Many towns have websites that list the different roles and responsibilities of town offices and organizations. As you connect with the community, it's essential to share these partnerships with families. This serves a double purpose: it shares what's happening in the classroom with families and provides an opportunity for families to continue the community connections from home.



Service-learning Opportunities

As children get to know their community, work with them to identify authentic community needs around which they might generate a service or service-learning project. Service-learning allows children to make a positive difference in the quality of life in their community. Partnering with local organizations involved in social justice or municipal organizations to learn about their work can often lead to a collaborative project. For example, learning about the town's Public Works Department might lead to a gardening project. Learning about childhood nutrition and health might lead to a child-created cookbook to be shared with the community.

Self-guided Opportunities

Loose Parts

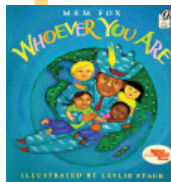
A variety of blocks can provide a solid foundation for your loose parts collection: wooden blocks, Brillo blocks, Lincoln Logs®, LEGOs®, DUPLOs®, or cardboard brick. Basically, any type of blocks will work. Gather other natural building materials like sticks and logs as well. Household items like mirrors and empty food containers can serve double duty for both loose parts and dramatic play. Make sure that empty food containers reflect the food items that the children in your care eat. You might even ask children to bring in empty containers to contribute to the collection. A variety of modeling materials can also make great additions: playdough, clay, or oobleck.

Linda's Picks

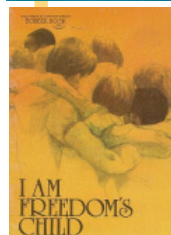
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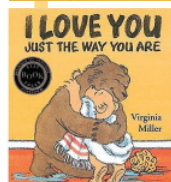
Our Grandparents: A Global Album by Maya Aimer, Sheila Kinkade, Cynthia Pon. Charlesbridge Publishing, Watertown, MA, 2010.



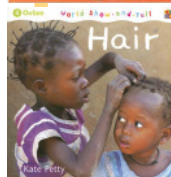
Whoever You Are by Mem Fox. Harcourt, NY, NY, 1997.



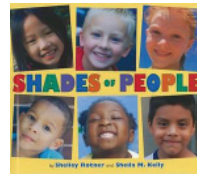
I Am Freedom's Child by Bill Martin. Trumpet Book Club, NY, NY, 1993.



I Love You Just the Way You Are by Virginia Miller. Walker & Co., NY, NY, 2000



Hair by Kate Petty. Cooper Square, Lanham, MD, 2006.



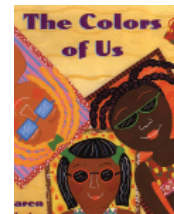
Shades of People by Shelley Rotner and Shelia M. Kelly. Holiday House, NY, NY, 2009.



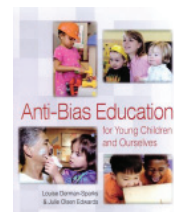
Sometimes I'm Bombaloo by Rachel Vail. Scholastic, NY, NY, 2005.



What Is a Scientist? by Barbara Lehn. Millbrook Press, 1999.



The Colors of Us by Karen Katz. Square Fish, 2002.



Anti-Bias Education for Young Children and Ourselves by Louise Derman-Sparks & Julie Olsen Edwards. NAEYC, Washington, DC, 2010. See p.18.

 **Dramatic Play**

At all times, not just for this Thread, it's vital that children see themselves reflected in all aspects of their classroom. In the dramatic play area, this means including dolls with a variety of skin tones, dress-up clothes that reflect what children see their families wear at home, and pretend food items that represent what children eat at home. Home visits can provide you with essential information in order to know the children in your care.

 **Outdoor Play**

Offer children the opportunity to play in a variety of outdoor settings (a public park, a meadow, the forest, near water), so they can begin to identify different ecological communities. Encourage children to notice how your community changes by season and what people (or communities) do when the seasons change. Help children notice what other living things in your community do as the seasons change (do they hibernate, go dormant, or migrate?). Encourage children to imitate through play what they observe. They may create homes for a variety of different animals.

 **Art**

The art area should include a variety of artists' media: watercolors, tempera paint, fingerpaints, oil pastels, crayons, collage, sponges, bits for mosaics. Provide mirrors and photographs of children and their families to inspire portraiture. Include examples of art from around the world. Display portraits of artists to show what artists look like. Be sure to include a mirror in this display to show that we are all artists. Nametags or necklaces can be created from slices of tree limbs (affectionately called tree cookies at Shelburne Farms).

 **Numeracy**

Offering items for children to sort and classify in multiple ways is a great way to build flexible thinking. A bowl of fruit, for example, can be sorted in infinite ways: by color, shape, peel or no peel, like or dislike, etc. Children can explore the diversity around them by looking for patterns and identifying similarities and differences.

 **Explore Table**

Fill your Explore Table with a variety of objects such as rocks, stones, feathers, buttons, seashells, or seeds. Encourage children to explore what the objects have in common and how they differ. Children can use recycled egg cartons as holders for various collections of items. Alternatively, offer only one type of object (e.g., pinecones), and discuss how the children feel about having only one type of object compared to having a diversity of choices.

One of These Things Is Not Like the Other



Sarah Kadden, Shelburne Farms Educator and Education for Sustainability Partnerships Coordinator

The practice of sorting and classifying is quite common in early learning, but what does it mean and what does it teach?

My discomfort with teaching or encouraging children to sort and classify emerged around human difference, and the mental models created by our beliefs around “similar” and “different.” At Shelburne Farms, we often use an activity called “People Key” to teach about dichotomous tree identification. In “People Key,” the facilitator chooses an observable characteristic in the students and “sorts” them. The students then figure out how they were sorted. The characteristic is usually something like lace-up shoes versus Velcro shoes, or hats versus no hats. The idea is to teach children how scientists sort, classify, and identify trees by noticing and identifying their differences. But here’s the thing: scientists often have more at their disposal than one-time visual observation, and more importantly, scientists’ first impressions can be wrong.

I’m actively involved in social justice and anti-racism work, and the “People Key” activity has always made me feel uncomfortable. It feels arbitrary and potentially dangerous. The characteristics we observe in people and the way we sort and classify them can have real consequences in our lives because of the value others ascribe to these characteristics, whether it’s lace-up shoes or perceptions of income. Also, these immediately observable characteristics aren’t always meaningful or real. This holds true for people, other living things, and basically any observable thing.

Let’s talk about race for a moment. Early race theorists attempted to divide people into categories. They sorted and classified people based on their perceptions of difference, and they believed these to be real, indisputable distinctions. They didn’t take into account the genuine connectivity between humans within a whole system, and they didn’t have any idea of the true breadth of humanity. The categories they chose were arbitrary and essentially meaningless, but the categories were immediately ascribed value, and those values have held fast, and have developed into deeply oppressive racist systems.

Systems thinker Donella Meadows describes these meaningless or untrue categories as “nonexistent boundaries.” She explains, “Everything, as they say, is connected to everything else, and not neatly. There is no clearly determinable boundary between the sea and the land, between sociology and anthropology, between a car’s exhaust and your nose. There are only boundaries of word, thought, perception and social agreement—artificial, mental-model boundaries.” (*Meadows, p. 95*). According to

Meadows, "We have to invent boundaries for clarity and sanity; and boundaries can produce problems when we forget that we've artificially created them." (*Meadows, p. 97*). The problem is that many of us don't realize we function with artificially created boundaries.

I was working the other day with a colleague who is an Assistant Dean in a school of Natural Resources. She described overhearing some of her graduate students at lunch singing the Sesame Street sorting classic, "One of these things is not like the other." As soon as she mentioned it, the next phrase popped into my head automatically: "One of these things just doesn't belong."

Sorting and classifying carries the risk of identifying things, or people, as "not belonging." And that builds a mental model where not belonging becomes real.

But *everyone* belongs in my classroom, and in my community.

How can we support young children in their navigation and budding understanding of the world, and their understanding of similar and different? How can we offer opportunities for the development of healthy mental models? If I had the solution I'd give it to you, but for now, I'm committed to using the ideas of similar and different, and sorting and classifying with a healthy dose of openness and skepticism. I try to offer children (and adults) the opportunity to explore their perceptions and assumptions, and provide gentle challenges where I can. Why do we separate boys from girls sometimes? Why is it important that we acknowledge the difference between yellow and green? Does it matter if his lunch box has dinosaurs on it and yours has unicorns?

When we teach children to sort and classify based on their perceptions of difference while they have extremely limited information, we teach them to constantly differentiate, and to believe that those boundaries are real and merit exclusion. It's the work of Education for Sustainability to break down some of those erroneous and ultimately damaging beliefs and allow inquiry, compassion, and creativity to flow. And to let everyone, and everything, belong.

Meadows, Donella H. *Thinking in Systems: A Primer*. Chelsea Griffin Publishing, White River Junction, Vermont, 2008.



Who Are We?



Facilitated Learning Experiences:

KEY: 🏠 Community • 🍎 Food & Farming • 🌿 Nature

EVERY SEASON

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Color Search

WHAT'S THE
Big Idea?
Diversity

Enduring Understandings

- The world is made up of many different colors.
- There are different colors for different reasons.
- Everything is unique and special.

Objectives

- Children develop their observation and matching skills.
- Children discover the diversity of colors found in the world around them.

Directions

It can be helpful for children to develop their “owl eyes” (see *What’s Happening?* p.131) prior to beginning this experience.

1. Explain that you will be going on a “Color Search.” Typically, this can be done as a walk outside, but consider what kind of adventure or classroom experience makes sense for your students. Have the children predict the colors they might see on their “Color Search.”
2. As your class is searching, have students name some of the colors they see. Were their predictions accurate? Did they see any colors they didn’t predict? Do they think they’ve named all the colors now?
3. Hand out the color sample chips and challenge the children to find a match for the color they’ve been given. Remember, the goal is to have them experience a diversity of colors.
4. You can facilitate this activity in one of two ways: you may want to begin with having children look for their color matches on things that belong to that place, such as rocks, mosses, trees, ground debris, signs, buildings, etc. You can also have them approach this activity thinking about different skin tones. Either way, it’s vital that children are allowed to acknowledge and name what they notice about human difference (see box).

Materials

- color sample chips (You can find paint sample cards, formica top samples, or paint samples on wooden squares at a hardware store. You could also use scraps of colored paper or colored pipe cleaners.)
- *The Colors of Us* by Karen Katz

The Colors of Us

People have different hair, eye, and skin colors and they wear different colored clothing. When we discourage children from voicing what they notice about people, we teach them that human difference is taboo. Young children also often believe different skin colors have different values, because those messages run deep in our culture and media. But all skin, hair, and eye colors are beautiful, and none have more intrinsic value than others. The value we perceive and ascribe to skin, hair and eye color are the foundations of stereotypes and bias. It is our job as teachers to foster a constructive conversation about human difference that acknowledges and affirms the colors of all people. *The Colors of Us*, by Karen Katz is an excellent resource.



Extensions

- ***The Black Book of Colors*** by Menena Cottin and Rosana Faria. This book is all in black but it has raised pictures of objects along with Braille.
- ***Color Dance*** by Ann Jonas
- ***Sky Color*** by Peter H. Reynolds
- ***All the Colors of the Earth*** by Sheila Hamanaka
- “Shape Search”: A variety of shapes cut from paper can be substituted for colors, or you can use three dimensional objects (a ball or a pair of dice).
- Place a specific textured object (sandpaper, cotton, etc.) in a bag. Have students feel what’s in the bag (NO PEEKING!), describe how the object feels, then find something in nature that has a similar texture.
- Use an empty egg carton to collect samples of your color. Talk with children about not picking someone’s flowers or taking personal belongings to include in their collection. When in a natural area, meadow, or field, talk about what ground rules you and your children want to maintain.
- Give each child a color chip that they keep throughout the year. One teacher made her students’ nametags from color chips and students looked for color matches through the seasons.

5. As children find their matches, offer them more color chips to choose from. They can work independently or in small groups.
6. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What colors did you think you’d see?
- What colors surprised you?
- What were some of the color matches you made?
- Why do you think _____ (item) was _____ (color)?
- Why do you think there are so many different colors out there?
- Do you think there is a different time of year when it would be easier to find some of the colors?
- Why is it important that there are different colors in the world?
- What color words would you use to describe the color of your skin?



Incredible Compost

WHO ARE WE?



EVERY SEASON



WHAT'S THE Big Idea?

Diversity

Enduring Understandings

- Healthy compost needs a variety of ingredients.
 - Food plants, like fruits and vegetables, grow in soil.
 - Healthy compost helps gardens grow better to support healthier communities.
- Leftover food scraps can be “recycled” by being broken down into compost and returned to the soil to help new plants grow.

Objectives

- Children show interest and curiosity in how compost is made and used.
- Children discover that all food breaks down into smaller components that can be used in compost.
- Children experiment with decaying food.

Directions

1. Read *Compost Stew: An A to Z Recipe for the Earth* by Mary McKenna Siddals. Discuss the process of how food decomposes and why it is important to compost. Young children often put their food scraps into a compost bucket but they rarely get to see the decomposing take place.
2. Tell your students they will get to witness this process in their classroom but they will have to help with it. Explain that a working compost pile needs both dead and living ingredients to make it work efficiently, and you will go collect what your compost pile needs.
3. Take the children for a hike to gather carbon material, such as dead leaves, straw, dead grass, sticks (small enough to fit in the bottom of your plastic container). Also collect a bucket of soil. If these things are not readily available, collect these materials at another location and bring them to your classroom.
4. Look in your compost bucket for the other important ingredients—kitchen food scraps! You can also include other nitrogen-rich items, such as green grass clippings, weeds, newly fallen leaves—anything that’s green and fresh.
5. Have the children lay the sticks on the bottom of your large plastic container, add a layer of dried dead items, then a layer of the kitchen scraps, and then a layer of soil. Use enough soil to cover the kitchen scraps to prevent fruit flies from hatching. Always keep your food

Materials

- **Compost Stew: An A to Z Recipe for the Earth** by Mary McKenna Siddals
- clear plastic container with a lid
- sticks and dead leaves (can be collected by children)
- soil
- food scraps



stirring the compost



the compost bucket: soil, straw, dead leaves, food scraps, water

Extensions

- **Composting Nature's Recyclers** by Robin Koontz
- Have a compost bucket in your room, encourage the entire school to compost for your school garden.
- Keep a calendar to record how the food breaks down. What type of food breaks down first? What food scrap takes the longest to decompose?
- Sing "The Compost Song."

scraps covered with soil or dried, dead leaves to keep fruit flies from breeding.

6. If the soil you added is dry, spray water on the layers. Moisture helps break down the solids. A container this size will not be able to decompose all your classroom waste, this is a model so your students can keep an eye on how the decomposition process works.

7. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions. Return to the discussion each time you stir or examine the compost.

8. Every four to five days stir the compost, so air can get into the system. Once again, make sure all the food is cover with soil or leaves. Students can keep a record of how many days it took various food scraps to decompose.

9. Use your compost in your class garden or a container garden.

Discussion Questions

- What did we put in our "compost stew"?
- What do you think will happen to the food scrap? What will happen to the other "ingredients"?
- What is happening now? (Return to this question each time you examine the compost.) What is different than last time? What do you think will happen next time we look?

The Compost Song

Sung to the tune of
"Take Me out to the Ball Game"

Take me out to the compost
Take me out to the pile.
Add some soil and a few good worms
I don't care if I'm turned and I'm churned.
'Cause it's root, root, root for the microbes;
If they don't win it's a shame.
For in two, four, six weeks, I'm out
in the old garden!

Written by Pam Ahern, teacher at Waits River School,
East Corinth, VT

Community Potlucks

WHAT'S THE
Big Idea?
Diversity

Enduring Understandings

- A community works together.
- Everyone contributes to their community.
- Healthy systems are diverse systems.

Objectives

- Children demonstrate an understanding of their own home culture and its value.
- Children cultivate an appreciation for the culture and contributions of other.
- Children show interest and curiosity about other people, new foods, and their own community.
- Children discover new foods, traditions, and friendships.
- Children experiment with food and community building.
- Children play-act community interactions, cooking, hosting and sharing.

Directions

1. Begin a conversation with children about the foods they eat at home with their families. You may have them draw or write about the kinds of foods they eat at home, do some play cooking, serving, and eating meals, and lead a discussion.
2. Brainstorm with the children how they could share foods from their home families with people from their school family. If the children are unfamiliar with the idea of a potluck, introduce the idea.
3. Work with the children to organize the potluck. First, find a space and establish a date and time to hold the potluck. Create and send invitations to families and the community, then brainstorm recipes and foods to be made in the classroom.
4. Identify adults who can help serve and organize the potluck. Children can prepare food in school, decorate the space, and help to set up, but you will also need plenty of adults!
5. Host a potluck!
6. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What foods did you try at the potluck?
- What surprised you about the foods served?
- What did you enjoy most about the community potluck?

WHO ARE WE?

EVERY SEASON



Materials

- access to school cafeteria with serving and eating utensils

Extensions

- Children create posters and write invitations to invite community members and families to the potluck dinner.
- With the help of teachers, children organize entertainment for the night.
- Create a cookbook of the recipes of all the food served at the potluck, self-publish it, and sell it as a fundraiser.

Natural Dyes

WHAT'S THE Big Idea? Diversity

Materials

- **Charlie Needs a Cloak** by Tomie dePaola
- wool fleece (Check online for sources to purchase wool. For example, www.pitchfork.org sells raw, dirty fleece and www.zwool.com sells clean roving for spinning or felting batt for felting projects.)
- plants and berries (See list on next page for suggestions.)
- mordants: alum and cream of tartar

Enduring Understandings

- All systems function because of variety.
- Color adds diversity to arts and crafts.
- Different colors can be mixed to form new colors.
- Colors can be changed.
- Colors come from different places.

Objectives

- Children cultivate an appreciation of various colors.
- Children show interest and curiosity in creating natural dyes.
- Children discover that various plants make certain colors.
- Children experiment with natural materials to make dyes.

Directions

When gathering natural dye materials, be sure to consult books ahead of time to learn about endangered, threatened, and protected flora, or flora that should be avoided for other reasons (i.e., poison ivy, stinging nettles).

Experiment with the following recipe and make up others as you go! No set amount of dye material is listed because dyeing with natural dyes is an adventure. Dye materials will produce a slightly different shade every time. Generally, the longer you simmer the wool in the dye, the darker the color will be.

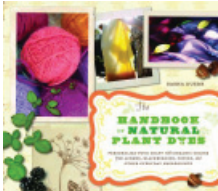
There is no hard and fast rule for making dyes, although in most cases the raw materials must be heated to release their colors. Most anything that grows in fields and around your house can produce wonderfully soft, beautiful colors. A mordant is a dyesetter, necessary to bring out and hold the color in the wool.

1. Read *Charlie Needs a Cloak* by Tomie dePaola. Discuss how Charlie used red berries to dye his wool red. Ask if anyone has ever picked or eaten blueberries. What happened to their fingers?
2. Explain that the children are going to do some experimenting with dyeing wool with plants and berries.
3. If possible, have the children hike around the schoolyard to look for plants and berries with which to experiment. If your schoolyard has a limited number of plants, ask children to bring some from home or plan a walk around the neighborhood. Check with neighbors before picking any of their plants!

Great Teacher
Resources!



**Harvesting Color:
How to Find Plants and
Make Natural Dyes** by
Rebecca Burgess



**The Handbook of
Natural Plant Dyes:
Personalize Your
Craft with Organic
Colors from Acorns,
Blackberries, Coffee**
by Sasha Duerr

Examples of Seasonal Sources








Spring

Source:	Plant part used:	Mordant:	Color:
Sumac	young shoots	none needed	tan/dark brown
Bloodroot	roots	alum	red-orange

Autumn

Source:	Part needed:	Mordant:	Color:
Sumac	berries	alum	yellowish tan
Zinnias	flower heads	alum	yellow

Other Suggestions: *(Color results will vary.)*

-  **yellow-gold:** Burdock, Queen Anne's Lace (use the whole plant)
-  **rusts and golds:** Marigolds, onion skins
-  **green-yellow:** bracken fern (use the fiddleheads before they unroll to get green), spinach, Mullein (leaves)
-  **browns and tans:** walnut hulls, tree barks, coffee, tea
-  **blues and grays:** blueberries, elderberries
-  **purples and grays:** dandelion roots, wild cherries
-  **reds:** cranberries

- Once you have the plants, follow this sample recipe and discover with your students what colors the plants make.
- Boil a pot of onion skins in water. Add salt and alum. Boil for at least 30 minutes, adding water as needed. Cool, strain out the skins, then add wet, washed wool or other materials to be dyed. Place the pot over heat again and simmer (never boil) for at least 30 minutes, then rinse the wool in cold water. Dry the wool or other material slowly in the shade.
- Experiment with other plants to explore the diversity of colors nature can produce. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What surprised you about natural dyes?
- What other plants would you like to try to use to dye wool?
- What else would you like to dye?
- How do you think colors are formed?

Setting the Color

Natural dyes will fade or bleed unless first boiled with a mordant. Different mordants produce different colors from the same dye. Remember to mordant your wool in a well ventilated area.

Common Mordants

Alum (*alum*

potassium sulfate):

Also called pickling alum. It is the safest to use with children and can be found at a drugstore or grocery store.

Iron (*ferrous sulfate*):

If you boil your dyes in an iron pot you will not need to use this mordant. Iron tends to darken colors.

Cream of Tartar: Used in combination with a metallic salt usually used in combination with alum. Brightens colors.

Extensions

- Use your dye to color playdough.
- Dye sheets of white paper to create your own colored papers. Use the paper to create collages or mosaics!
- Try natural dyes on cotton t-shirts.



Taste Tests: “Try It, You’ll Like It”

Materials

- *I Will Never Not Ever Eat a Tomato* by Lauren Child
- small samples of different foods
- small paper cups for sampling
- tally sheets to register students’ reactions to the food tasted (Appendix, p.255)

WHAT'S THE
Big Idea?
Diversity

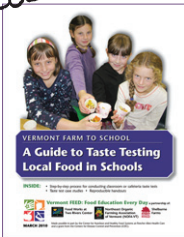
Enduring Understandings

- There are many different tastes in the world.
- Our preferences for tastes can change over time: some things take time to get used to.
- Everyone’s preferences for tastes are unique. What tastes good to me might not taste good to you; or “Don’t yuck my yum!”
- “Variety is the spice of life.”

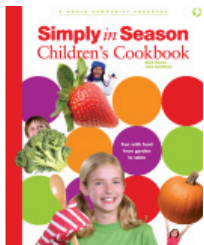
Objectives

- Children demonstrate the willingness to try new foods.
- Children show interest, curiosity and appreciation about a diversity of foods.
- Children experiment with tasting different foods.
- Children begin to learn to harvest, prepare, and serve food.
- Children develop an appreciation of foods from different families and cultures.

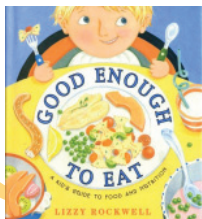
Great Teacher
Resources!



A Guide to Taste Testing Local Foods in Schools by Vermont Farm to School.
Download free at www.vtfeed.org



Simply In Season Children's Cookbook: Fun with Food from Garden to Table by Mark Beach and Julie Kauffman



Good Enough to Eat: Kid's Guide to Food and Nutrition by Lizzy Rockwell

Directions

Taste tests can be simply trying new foods in your classroom or they can be a schoolwide effort to have students make healthier food choices. In early childhood classrooms, taste tests can happen as frequently as you like and should introduce children to new foods whenever possible. In addition to fresh fruits and vegetables, we encourage you to include foods that are special to children and their families, or that are important to the different cultures represented in your classroom. These foods may be fresh fruits and vegetables that aren’t common in your area or dishes that your families prepare or purchase. We have found that scaffolding taste tests by beginning with the raw food, moving on to a cooked version, and then finally trying a processed version allows children to develop an appreciation of and willingness to try new foods when they encounter them in meals. For example, you might start with raw broccoli, then try it roasted, sautéed, or steamed with different seasonings, and finally offer a broccoli soup.)

If you have a school garden, harvest a crop with your students and find a recipe that they’d like to try. If you do not have a garden, work with the food service staff to use foods that are available through the cafeteria. This collaboration can help cut down on food waste in the cafeteria.



Young children can vote on taste tests using simple smile, frown, or straight face symbols.

Students who have previously sampled a food in their classrooms are more likely to eat that same food when it is later served in the cafeteria.

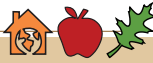
1. Read *I Will Never Not Ever Eat a Tomato* by Lauren Child. Discuss if anyone has ever felt that way about eating certain foods. Explain that your class will be holding taste tests throughout the year. The goal will be for children to try new and different foods. Consider using this experience with “Eating the Rainbow,” p.81 to reinforce the importance of eating a variety of foods.
2. Offer small servings in a positive, non-coercive atmosphere. Invite children who are familiar with the food (and like it) to share what they like about it.
3. Have students help prepare the food; if they make it, they are more likely to eat it. If students grow and prep the food, this also improves the odds that they will try it.
4. After the children try a food, have them share their reactions. They can tally their preferences on a graph, write a simple smiley, frown or straight face to show their preferences, or be part of an open discussion of how they felt about the food sample.
5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- How did you feel about the taste test?
- What did you learn about yourself during the taste tests?
- How has your attitude toward trying new or different foods changed?
- Can you think of a food that you used to not like but now you do?
- Can you think of foods that taste better to you when eaten together rather than separately?

Extensions

- Invite local farmers to school to talk about the produce or food they grew that the children will use in taste tests.
- Host a “cook off” with other classes. Trade foods to taste test and determine which food was more popular.
- Work with food service staff and families. Perhaps food service can provide the foods and family members can help with facilitating the actual taste tests.
- ***Oliver’s Vegetables*** by Vivian French
- ***Oliver’s Fruit Salad*** by Vivian French
- ***The Vegetables We Eat*** by Gail Gibbons



Life under a Log

WHAT'S THE Big Idea? Diversity

Materials

- magnifiers or bug boxes
- "Life under a Log: Critter ID" sheet (Appendix, p.256)
- a rotting log, large rock, or leaf pile to turn over

Enduring Understandings

- Communities are made up of living things.
- Every living thing has a special role in its community.
- Every living thing contributes to its community.
- Living things adapt differently to meet different needs.

Objectives

- Children discover what lives under a log.
- Children demonstrate an awareness of these creatures' roles in the community: making soil.
- Children demonstrate an understanding that a diversity of creatures is needed to have a successful community.
- Children develop empathy through treating other living creatures with respect.

Directions

NOTE: In the classroom, demonstrate how to roll over a log using a real log and plastic worms and spiders. Slowly roll over the log, gently brush aside leaf litter, and carefully look for worms, salamanders, and other living things. Have the children pretend to rub soil into their hands if they wish to pick up or hold a critter. Our hands have soap and other oils that are harmful to critters that breathe through their skin. When it is time to return the creatures to their log, show how to first roll the log back into place, then gently set the creatures next to the log so they can crawl back under it. If you put the creatures back first and roll the log over them, they can be crushed. After practicing with your students, do the following.

1. Ask children if they'd like to see who lives under a log (or rock, or leaf pile). While walking outdoors, find a rotting log, slab of rock, a board, or an area of thick leaf litter.
2. Before approaching, suggest to the children that they might seem like giants to the tiny creatures living under a log. Ask, "How should we behave so as not to frighten or hurt these creatures?" Encourage them to be "gentle giants."
3. Model again how to gently roll over a log and then begin to look closely at the tiny world of creatures who live there. Remind children that the creatures will try to hide as soon as the log is rolled over.
4. Before attempting to pick up any of the creatures, rub soil on the palms of your hands to cover up any soap or lotion. Don't pick up these fragile creatures if your hands have insect spray or sunscreen on them. Earthworms and amphibians, such as salamanders and

toads, breathe through their skin and will suffer from the insect spray and sunscreen. Use bug boxes or magnifiers to examine the creatures. Note the diversity of creatures. Count their legs, note their shapes, and remark on their colors.

5. Explain that slugs, ants, and beetles will eat the log. They will attract spiders, salamanders, and centipedes. Rotting logs provide homes for many critters and they are also places where our valuable soil is made. The creatures turn the rotting log into soil. Remind children to be respectful of our forest recyclers and their homes.
6. Remind children to be gentle giants when “putting the roof back on.” Once the log is rolled back, gently return any salamanders or worms to the edge of the log and they will return to their home. If you put the creatures back first then roll the log over, the critters may get crushed.
7. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions. Children can also record their findings in journals.

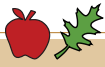
Discussion Questions

- Who lives here?
- What are they doing?
- What else is here besides the critters?
- Are these critters a community? Why or why not?
- How is the log community like the community you live in?
- Where do you think soil comes from?
- How does soil made by creatures help people?
- How do the creatures living under a log help one another?
- What would happen if only one kind of creature lived under the log?

Extensions

- ***A Log's Life*** by Wendy Pfeffer
- ***What's Under the Log?*** by Anne Hunter
- ***A Salamander's Life*** by John Himmelman
- Make a large mural of a rotten log with windows cut out in it. Children can draw the creatures they found and place them in the log behind the flaps.
- Collect different types of soil (driveway, garden, humus), mix with water and create a painting with mud.
- With a large empty box, construct a rotting log that children can crawl into, role-playing the creatures they spotted making the soil.





Look What I Found!

WHAT'S THE Big Idea? Diversity

Materials

- empty egg cartons
- plastic or paper bags
- collage-making supplies (glue, markers, poster board, etc.)

Enduring Understandings

- A natural environment is healthier with a diversity of plants.
- A human environment is healthier with a diversity of people.
- Seeds and plants have different shapes and colors and thrive in different conditions, but are all seeds.
- Each plant and seed contributes to the community.
- People have different shapes and colors, strengths and talents, but are all people.
- Each person contributes to the community.



Objectives

- Children discover many different kinds of seeds and plants.
- Children experiment with seeds and found objects as an art medium.
- Children play with found objects.

Directions

1. As part of getting to know who we are, take your class on a fall walk looking for the natural diversity that occurs around the schoolyard.
2. Walk around the schoolyard or neighborhood, collecting natural objects, leaves, stones, petals, etc. If you are fortunate enough to have a school garden, have children gather seeds and plants that have gone by or that can no longer be harvested.
3. After collecting, gather together to display your findings. Have each child display his or her findings in any manner they wish on a large piece of paper.
4. Have the children partner with the person beside them to talk about their findings. Encourage good listening and good questions about why the objects are displayed the way they are.
5. After everyone has had a chance to share their findings, have them pick some of their findings to use in a nature collage. Hand out art supplies, glue, markers, and poster board to display the collage.
6. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Extensions

- Give students specific guidelines for displaying their findings. For example, they might separate findings by size, texture, or color.
- Sort findings by living and nonliving.
- Make a collage from the variety of seeds you find in your community.

Discussion Questions

- Why did everyone find so many different objects?
- Why is it important that there are different plants and seeds in our neighborhood?
- How does having a diversity of people in our neighborhood make our community stronger?

Plant Parts We Eat

WHO ARE WE?

FALL



WHAT'S THE Big Idea? Diversity

Enduring Understandings

- We rely on each other and other living things to meet our needs.
- Plants have different parts. Each part has a unique role in supporting the plant.
- Different plants have different parts that are good to eat.
- A healthy diet requires diversity.

Objectives

- Children cultivate and grow some of their own food.
- Children show interest and curiosity about where their food comes from.
- Children experiment with tasting different foods.

Directions

For this experience, you and your students will need access to a garden or farm. If you are able, consider growing a garden at your school (see “School Gardening with Young Children,” p.202 and “Digging In,” p.204). If you lack space, you can grow vegetables in various containers.

1. As produce becomes ripe, visit the garden and show children how to harvest different types of produce, from peas in the spring to kale in the late fall. This allows children to follow the cycle of the seasons and plant growth. Invite your children to harvest and eat the produce right away. Eating straight from the plant never fails to tempt non-veggie lovers. If you are purchasing the produce, a field trip to the store gives children an opportunity to see the diversity of fresh fruits and vegetables available and the different colors, sizes, and shapes they come in. Gather and wash your harvest.
2. Offer the freshly harvested or store-bought treats to the children as you read *Tops and Bottoms* by Janet Stevens. Discuss what parts of the plants we eat when munching on carrots (root), lettuce (leaf), broccoli (flower), and tomatoes (fruit).
3. On a large cookie sheet, let children shape a plant with the harvested vegetables. Cut the carrots into thin sticks for the “roots,” add celery sticks for the stem, lettuce as the leaves, and broccoli pieces as the flower. Cherry tomatoes are the fruit to eat. Afterwards, eat all the parts of that plant!
4. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.



Materials

- *Tops and Bottoms* by Janet Stevens
- carrots, celery, broccoli, lettuce, cherry tomatoes (from a garden or a store)
- cookie tray
- cutting board and knife

Extensions

- Recruit Master Gardeners, parents, grandparents, or retired folks to lend a hand in the school garden.
- Invite a farmer to your class to talk about growing food.
- Plan for your garden in the late winter. Have children cut out pictures of vegetables and fruits from seed catalogs and make a map of what they'd like in the garden.

Discussion Questions

- Where does food come from?
- What is your favorite vegetable?
- What part of the plant is your favorite vegetable?
- Can you think of any other roots/leaves/stems/seeds/fruits that we eat?
- What should we plant in our garden next year?



Who Am I? Who Are You?

WHAT'S THE Big Idea? Diversity

Materials

- *Whoever You Are* by Mem Fox
- variety of "flesh"-colored crayons
- paper
- mirrors

Extensions

- *Why Am I Different?* by Norma Simon
- Try this activity on a monthly basis and have the children compile their own self-portrait books, or display in your classroom.

Enduring Understandings

- Healthy communities require diversity.
- Every living thing experiences the world differently.
- Each living thing is unique and special.

Objectives

- Children demonstrate an understanding that children all over the world share commonalities and differences.
- Children show interest and curiosity in other children.
- Children experiment with drawing a self portrait.

Directions

1. As the school year begins and you are building community, read *Whoever You Are* by Mem Fox. Talk about all the children represented in the book and the things all children have in common. Talk about differences, too, and that neither similarities or differences mean better or worse.
2. Have children talk about themselves. What do they enjoy doing? What books do they like? What are their favorite foods or animals?
3. Ask each child to draw a picture of herself or himself. Have a variety of skin-tone crayons for them to choose from. Don't correct them if they choose a color that does not match their skin color.
4. Post the pictures for all to see with a heading of "Our Class" or save the pictures and have children draw more pictures of their favorite things. Combine all the pictures into a book, one for each child. Share the books with families.
5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

The Colors of Us

People have different hair, eye, and skin colors and they wear different colored clothing. When we discourage children from voicing what they notice about people, we teach them that human difference is taboo. Young children also often believe different skin colors have different values, because those messages run deep in our culture and media. But all skin, hair, and eye colors are beautiful, and none have more intrinsic value than others. The value we perceive and ascribe to skin, hair and eye color are the foundations

of stereotypes and bias. It is our job as teachers to foster a constructive conversation about human difference that acknowledges and affirms the colors of all people. *The Colors of Us*, by Karen Katz is an excellent resource.



Discussion Questions

- Why is it important that there are different colors in the world?
- What color words would you use to describe the color of your skin?

Ice Treasures

WHAT'S THE
Big Idea?
Diversity

Enduring Understandings

- Healthy systems require diversity.
- Colors can be mixed to create a different color.

Objectives

- Children experiment with colors.
- Children understand that colors can be mixed and changed to make new colors.

Directions

With its colder temperatures and snow, winter is a great time to create “ice treasure.” Even if snow does not occur in your climate, students will enjoy making ice treasures and hiding and finding them outside.

- Review the water cycle through song or story. See “The Water Cycle Dance,” p.152, or read *The Water Cycle* by Helen Frost.
- Set up an experiment table where water can be poured without damaging anything. Set clear plastic cups on a tray or cookie sheet (the tray will collect any spilled water). Ask students to pour water in each cup until each is $\frac{3}{4}$ full. Let them experiment with adding drops of food coloring to the water and have them observe what happens. Ask students to predict what might happen to the original color if a second color is added. Add a second color and observe the results.
- Place your cups outside (if below freezing) or in a freezer until the water is frozen.
- Once frozen, pop the colored ice out of the containers (this will stain fingers), and take the treasures outside to hide in the snow or grass. Set your students loose to find them, or invent other ways to play with the treasures.
- Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What colors of food coloring did we use? How many different colors did we start with?
- How many different colors are in our ice treasures? How many colors did we start with? How did we get more colors?
- Are colors always just red or just blue?
- What do you predict will happen to the ice treasures if we leave them outside?

WHO ARE WE?

WINTER

Materials

- *The Water Cycle* by Helen Frost
- clear plastic cups
- food coloring
- water



Extensions

- **One Red Dot** by David A. Carter
- **Blue 2** by David A. Carter
- Using old ice trays instead of clear plastic cups, freeze the colored water and put the ice cubes in your water table with snow or water. If you put them in water, ask children to predict what will happen to the ice treasures.
- Continue to experiment with color variations using finger paint or water colors. Discuss findings. Any surprising results?



Stone Soup

WHAT'S THE Big Idea? Fairness Equity

Materials

- *Stone Soup* by Heather Forest (We love this global version of this classic story but any version will do. You might even consider reading more than one version and comparing them.)
- ingredients and equipment to make stone soup (Most versions of the book include a recipe, or you can use our recipe on the next page.)

Enduring Understandings

- Resources need to be shared to meet the needs of living things.
- When people work together, they can get more done.
- When we share, everyone can get what they need.

Objectives

- Children show interest and curiosity in cooking.
- Children discover the joy of cooking and sharing a meal with others.

Directions

1. Read *Stone Soup* by Heather Forest. Discuss the story, and how sharing helped everyone get what they needed.
2. Tell the students that you will now make a stone soup! You can follow the soup recipe in the book or use our version on the facing page. You can consider asking children to bring in one vegetable from home if that is possible for families, or have a variety of vegetables available in your classroom and allow each child to pick one to add to the soup pot.
3. Discuss proper hygiene when cooking. (See “Bread, Good Bread” in *How are We Connected*, p.196 and “Tips on Cooking with Children,” in Appendix, p.258). Have children wash their contribution to the soup and cut it into bite-sized pieces.
4. Invite families, another class, or community members to share in eating your stone soup. If there is an organization in your community that provides meals to the hungry, find out if they would serve soup made off the premises and bring the soup to be served there.
5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.



Students cut their contributions to the stone soup into bite-sized pieces.

Discussion Questions

- In the book, why did the people in the town not share the food they had?
- Would you have shared your food if you had lived in the town?
- How did it feel to share the soup you made?
- Why is it important to share food?
- How do you feel when someone shares something with you?
- What else could we do that would be better if we did it all together?

Shelburne Farms Stone Soup

This recipe makes 36 four-ounce servings of soup.

INGREDIENTS

2 qts. water
1 qt. peeled tomatoe with juice
1 qt. vegetable broth
1 clean stone
6–8 c. total of a variety of
vegetables, chopped into bite-
sized pieces (any combination
of what's available will do)

- carrots
- onions
- potatoes
- green beans
- corn
- peas
- beets
- mushrooms

herbs for flavor: basil, dill,
marjoram, thyme

¼ c. pasta
¼ tsp. pepper
1 tbsp. salt

INSTRUCTIONS

1. Bring water, broth, and tomato juice to a boil.
2. Add stone, and slow-cooking vegetables (such as onions, potatoes, carrots, beets), and simmer for 25 minutes.
3. Add vegetables that cook more quickly (such as peas, corn and beans) and simmer for 15 more minutes.
4. Add pasta and cook for 7 minutes.
5. Season to taste with salt, pepper, and herbs.
6. Share and enjoy the soup.

Extension

- On a felt board, put felt cutouts of various vegetables and characters from the story. Children can retell the story using the felt cutouts.



Feeding the Birds

WHAT'S THE Big Idea? Fairness

Materials

- pine cones of all sizes
- birdseed
- Crisco or peanut butter
- cheerios cereal
- string

Enduring Understandings

- Healthy communities and systems require diversity.
- Everyone needs to share resources with other living things.
- Every living thing needs help from others sometimes.
 - Every living thing can help others.
- We all contribute to our communities.



Objectives

- Children demonstrate an understanding that sharing resources makes a healthier community, because sharing allows everyone to get what they need.
- Children show interest and curiosity about others in their community.
- Children discover the importance and joy of helping others in their community.

Directions

1. As part of a discussion on what all living things need, guide the talk to wild animals that live in the school neighborhood. Discuss ways the children could share what they have with animals.
2. Ask families or community members who may have Christmas trees to donate them after the holiday for the schoolyard. Set the trees up as near to your classroom windows as you can so that students can observe the animals that come to eat from the trees.
3. If there are no allergies in your classroom, have children coat pine cones in peanut butter. Otherwise, use crisco. Roll the coated pine cones in birdseed and tie a string to each cone. String cheerios as garland.
4. Take pine cones and garland outside and hang on the trees. Observe what animals eat these winter foods. Keep a record of which animals visit and what they prefer to eat.
5. Discuss why some animals need people to share food with them in winter and the importance of keeping food available throughout the winter as the animals will become dependent on this food source.
6. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Extensions

- Discuss other needs of your community. Include children in brainstorming who might need help and how we can ask, and find, what they need.
- Stage a clothing drive for your school. Ask for donations of usable winter clothes from staff, families, and other organizations. Have children sort clothing, set up tables with clothes and provide refreshments for their "shoppers."

Discussion Questions

- What animals were you surprised to see eating your birdseed and cheerios?
- What did you notice about the animals and how they ate, moved, or behaved?
- What other ways could our class share resources with all members of our community?

The Fabulous 5

WHO ARE WE?

SPRING



WHAT'S THE Big Idea?

Interdependence Cycles

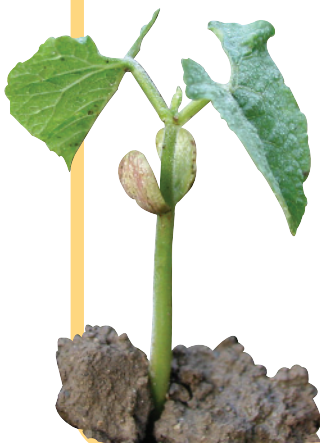
- We rely on each other and other living things to meet our needs.
- We need food to live.
- Our food comes from the land.

Enduring Understandings

- All living things (including the food we eat) have needs.
- Plants need a balance of sun, water, air, space, and soil to grow successfully.

5 Things a Plant Needs to Grow

"The Fab 5"



Sun

Water

Air

Space

Soil

Objectives

- Children demonstrate problem-solving by following clues in a scavenger hunt.
- Children cultivate an awareness of the five things a plant needs to survive.
- Children show interest and curiosity in what a plant needs to grow.
- Children build awareness of what living things need to survive.

Directions

1. Before the actual lesson, find time to place the clues around your schoolyard, garden, or even classroom. Ideally, it would be outside.
2. Show the children a handful of bean seeds. Ask the children, "What do you think bean (and other types of) plants might need to grow and live?" Once they have shared some of their ideas, have a "seed" invite the children to go on a scavenger hunt to discover what it needs to grow into a plant! (Read Clue 1.) Tell students that along the way they will be make a bracelet to help them remember what plants need to live.
3. As you visit each station, identify the visual clue that represents one of the "Fab 5": a picture of a sun, water or a spigot, a pinwheel, a bucket with soil, and a picture of plants nicely spaced. At the first station, distribute the pipe cleaners and the first bead. At each of the following stations, help children add a bead to their pipe cleaners. It can be helpful to review what each bead represents each time they add a new one. (Black beads = the seed; yellow beads = the sun,

Materials:

- a pipe cleaner for each child
- baggie with bean seeds

Sun

Station:

- baggie of yellow beads*
- an image of a sun
- clue card (see p.77)

Water

Station:

- baggie of blue beads*
- jar of water, image of spigot
- clue card (see p.77)

Air

Station:

- baggie of clear beads*
- a pinwheel
- clue card (see p.77)

Space

Station:

- baggie of green beads*
- a picture of plants nicely spaced in a row
- clue card (see p.77)

Soil

Station:

- baggie of brown beads*
- bucket (or picture) of soil
- clue card (see p.77)

*Include enough beads for each child.

Extensions

- Using the “Bean Life Cycle Cards” (Appendix, p.), have children place the cards into the correct order.
- Plant some bean seeds in the garden or a container. Eliminate one of the “Fab 5” and see if the plant will still grow.
- Soak lima bean seeds in water for a few hours, then have children dissect a bean to discover the tiny bean plant asleep inside. Try this with other types of seeds and compare your findings.
- Save some dried bean plants and beans from the garden, then have children remove the bean pods and shuck the bean seeds out of the pods. Compare the seeds. What can you do with these beans? Eat them, plant them, or use them in a seed mosaic.
- **Who Is in the Garden?** By Vera Rosenberry
- **How Groundhog’s Garden Grew** by Lynne Cherry
- **The Carrot Seed** by Ruth Krauss
- **Tops and Bottoms** by Janet Stevens
- **The Ugly Vegetables** by Grace Lin

blue beads = water; clear beads = air; brown beads = soil; green beads = the space the plants need to grow.

4. At the last station (soil), make sure to have a spot to plant the bean seeds. Encourage your students to observe if the seeds will grow into a plant that will have all of the “Fab 5”!
5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- Do you know any other living things that need the same things that a seed needs to grow?
- Where does the plant get the “Fab 5”?
- What do you think would happen to a plant if it didn’t have all of the “Fab 5”?
- What do people need to live?
- Where do people get the things they need to survive?



Seed

Clue 1

In order for me to grow big and strong,
You are going to need to help me along.

Five things I need to stay alive—
We'll call them the **fabulous five!**
The first will surely help me wake.
It's cold in here for goodness sake!
I must warm up and feel the light—
Take me where it's warm and bright.

Sun

Clue 2

I'm much warmer now, thanks a bunch,
But I think it's getting time to munch.
I make my own food whenever I'm hungry,
But the problem is, I'm really *thirsty!*

Look around—you need to think,
and find something for plants to drink.

Water

Clue 3

You need me and I need you!
Soon you'll learn a step or two
We eat and drink and need to share,
'Cause both of us must breathe the
_____.

Look around—think and observe.
Can you see where wind is pushing air?

Air

Clue 4

Even though I'm little now
I'll soon enough be big—somehow.
I'll grow with others (it's not a race)
Just don't plant me too close,
I need my _____.

Look around! You'll see a sign,
showing plants with room, growing fine.

Space

Clue 5

Sun, water, air, and space—
are things I need to grow.
But there's one more thing I need, you know.
It's dark and brown, under your feet.
Without it my life will be incomplete!
Look around—a bucket and a sign—
complete the 'Fab Five' and your plants will
grow fine!

Soil

The Fab 5!

Sun
Water
Air
Space
Soil

Plant your seeds!



Dress up a Bean Plant

WHAT'S THE Big Idea? Cycles

Materials

- straws tied to a string
- two large green cloth or paper leaves
- large white cloth or paper petals made into a necklace
- several large green paper string beans
- bee puppets

Enduring Understandings

- All plants have similar parts: roots, stems, leaves, flower, fruit or vegetables and all produce seeds.
- Each part of a plant has a unique role in supporting the plant.

Objectives

- Children discover the parts of a plant.
- Children role-play plants by dressing up as plants.

Directions

1. Fill your class with various plants, flowers, or vegetables for the children to observe. On outdoor walks, observe plants around your school: grass, trees, weeds, or whatever is growing. Begin a conversation about plants by asking children what they see, feel, and smell about these plants. What do they notice is similar among the various plants? What is different? Can they identify some “parts” of a plant?
2. Ask for a volunteer who would like to be turned into a bean plant.
3. Building on the students’ observations of the plants, ask for suggestions about what this child needs to be turned into a plant. Leaves, roots, and a stem might be a few suggestions.
4. Tie straws that have been attached to string around the volunteer’s ankles to represent the **roots** that stabilize the plant and suck up moisture from the soil. The child’s legs will represent the plant’s **stem**, which moves food and nutrients throughout the plant as it stabilizes the plant.
5. Place two green cloth or paper leaves over the child’s arms. These represent the first two true **leaves** of a young plant.
6. The volunteer’s head makes a perfect **stigma**, the center of a flower, and a necklace of large white cloth or paper petals can be placed around the child’s neck to complete the plant’s **flower**.



7. Explain that the flower needs to be pollinated to produce a bean. Have another child approach the volunteer's flower with a "flying" bee puppet. After pollination, the flower falls off and behold, beans!
8. Tell children that as the bean grows, it develops seeds. These seeds can be eaten or saved for planting next spring!
9. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What are the different parts of plants?
- What do the different plant parts do?
- How do other plants grow?
- Where can you find seeds in other plants?



Extensions

- ***The Big Yellow Sunflower***
by Frances Barry
- ***Jack's Garden*** by Henry Cole



Posy Poetry

WHAT'S THE Big Idea? Diversity

Materials

- 4–7 different flowers, buildings, or animals (either photos or the real things)
- scraps of paper for each child
- pencils for each child
- an envelope at each object/photo
- large pieces of paper on which to write the finished poems
- ***It's Raining Pigs and Noodles*** or ***A Pizza the Size of the Sun*** by Jack Prelutsky

Extensions

- If children cannot write or feel insecure about writing their descriptions, have an adult at each object to write what each child says. The adults can also ask questions to prompt language development.
- For 3–5 year olds, this activity may be done in a big group. Children can call out descriptive words and the teacher can write them on individual pieces of paper. The teacher then reads each word aloud and the children guess which object is being described.
- Posy Poetry can become “Tractor Poetry” or “Tree Poetry.” Use your imagination to help children look at all sorts of objects with a poetic eye.

Enduring Understandings

- Diversity of plants makes an environment healthier.
- Plants have flowers of different size shape and color to help them survive.

Objectives

- Children show interest and curiosity about flowers, buildings, or animals.
- Children experiment with words to describe flowers, buildings, or animals.

Directions

1. Read a poem such as any from Jack Prelutsky's *It's Raining Pigs and Noodles* or *A Pizza the Size of the Sun* to inspire your class.
2. Explain to your students that it is their turn to become poets. They will work alone and then with a group to create a poem about flowers or buildings or an animal.
3. Point out the objects you have chosen to be written about. Every child should visit each one and on scraps of paper, write two to three words to describe the object. The words could describe how the object makes them feel or what it reminds them of. Once they have written their words, they should put their slips of paper into the envelope and move on to the next object.
4. When all the envelopes are full, gather them up and shuffle them, then divide your class into groups, one for each envelope. Give each group an envelope (they shouldn't know which object is being described inside).
5. Each group then lays out their scraps of paper and begins to arrange them to make a poem. They must use every slip of paper and may add a few connecting words such as “and” or “the.”
6. Have each group write its poem on a large sheet of paper and prepare to present it to the other children.
7. Once all the groups have completed all the tasks, pull everyone together for a poetry reading. Each group presents its poem, then the rest of the children try to identify the object the poem described.
8. Post poems around the room and share with other classes and families.
9. Encourage budding poets to write on their own. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

Discussion Questions

- What did it feel like to write a poem together?
- Can you think of other things we could write poems about?

Eating the Rainbow

WHO ARE WE?

SUMMER



WHAT'S THE Big Idea? Diversity

Enduring Understandings

- We rely on each other and other living things to meet our needs.
- Food comes from nature: from plants and animals.
- Plant food comes in many colors and with many different benefits for our body.
- Eating a variety of colors of food leads to a healthier body.

Objectives

- Children show interest and curiosity about tasting different foods.
- Children discover that the color of a food can indicate how it helps our body.
- Children experiment with tasting different fruits and vegetables.

Directions

1. Read *Eating the Rainbow: Fruits & Vegetables From A to Z* by Lois Ehlert.
2. Discuss how important it is for our health to eat foods that are a variety of colors. Talk about how boring things might be if we only saw white and no colors. If we ate only white foods, it would probably get boring, and it would not be best for the health of our bodies. The more colors in the food that we eat, the better it is for our bodies. Ask your students if they would be interested in trying a taste of a fruit and vegetable “rainbow” and finding out how different colored produce can help us be healthy.
3. Gather a variety of multi-colored fruits and vegetables, either from a garden or from a grocery store or farmer’s market. Have children wash and cut the produce into bite-sized pieces.
4. Sort the fruit and vegetable pieces onto five plates by color: red, yellow/orange, green, blue/purple, and white/brown. Place a label next to each plate to indicate how fruits and vegetables of this color help our bodies (see box).
5. Invite the children to taste fruits and vegetables from each plate. As they taste a sample, have them indicate their preference with a smile or frown face. After the children have tasted and recorded a color group, give each child a bead of that color to add to a pipe cleaner or string.






Materials

- ***Eating the Rainbow: Fruits & Vegetables from A to Z*** by Lois Ehlert
- variety of different colored fruits and vegetables
- child-sized vegetable cutting implements
- five plates
- a label for each color to indicate how this color fruit or vegetable helps our body (see box below)
- beads to represent the colors of the rainbow (one of each color per child)
- string or pipe cleaners on which to string the beads

Fruit & vegetable

Colors for Your Health

Fruits and vegetables that are the colors below generally benefit specific areas of the body.

-  **red:** heart, head (memory)
-  **yellow/orange:** heart, eyes, immune system
-  **green:** eyes, bones, teeth
-  **blue/purple:** head (memory)
-  **white/brown:** heart



Extensions

- After a harvest in the garden or by using store bought fruits and vegetables, work together to make one big rainbow to eat.
- Create a paper rainbow on a large sheet of white paper. Instead of coloring each arc of the rainbow, draw or paste pictures from seed catalogs of fruits and vegetables.
- Create a paper rainbow on a large sheet of white paper. Have students track the colors they eat in their snacks by adding that color to the rainbow using dot paints.
- Before cutting fruits and vegetables, arrange them in settings and have the children draw still life pictures.

When they have tasted every color, they will have a rainbow bracelet to remind them to “eat the rainbow.”

6. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions. Whenever your students are eating, remind them to check out the colors in their lunch or on their plate. Do they have a rainbow to eat?

Discussion Questions

- What is your favorite color? Can you name some fruits or vegetables that are that color?
- What is your favorite fruit or vegetable? What color is it?
- Can you think of a way to help others remember what each color does for our body? Can you think of a song? A rhyme?