



LIVEWELL KIDS GARDEN EDUCATION MODULE THREE: K – 5th GRADE COMPOSTING

Helpful Bites

There is a lot of information to digest in the LiveWell Kids lessons. “Helpful Bites” is our way of providing a quick reference tool to the key points and messages in each lesson. It is intended to help guide your discussions, but should not replace the full content.

Preparation

- Set up the compost activity area with greens, browns and filled watering cans
- Set up the compost observation activity with 2 trays of compost, magnifying lenses, clipboards, blank paper and drawing tools
- Explain the compost building activity to the helper/teacher as they will be running that activity

Introduction

- Introduce yourself and your helpers and lead the class through a mindful breathing exercise
- Discuss the benefits of composting and vermicomposting/vermiculture
- Briefly describe both the compost drawing activity and the compost building activity
- Divide the class into two groups, sending one group with the helper/teacher to do the compost building activity
- Take the other group to do the compost observation and drawing activity

Compost Drawing Activity

- Have the kids observe compost in the trays with magnifying lenses
- Have them draw/label what they see in the compost
- Switch groups

Compost Building

- Divide the group into two lines at the compost area
- Have two students at a time approach the green and brown piles and add to the composter: one scoop of material from greens, two scoops from browns, a splash of water and mix
- The next pair repeats the process
- Continue until HALF of the materials are used, reserving the other half of the materials for the second group
- Once each student has been through the line, show them the worm bin if your garden has one
- Switch groups

Garden Check and Reflection

- When both activities are done, take the class to the garden beds to check on the progress of their plants from the last lesson
- Close the lesson with a recap of what they’ve learned
- Thank the parent helper and teacher
- The drawings from the compost drawing activity serve as their “Reflection Pages”. You can either put them in the LiveWell box in the school’s front office or let the students take them home. If you are sending them home, try to get a few photos of drawings that best represent this lesson and email to the Garden Coordinator: mishell.balzer@bchd.org

GARDEN EDUCATION: MODULE THREE

K – 5th GRADE – COMPOSTING

Education Standards

For California Health Education and Common Core Standards, please see Appendix A on page 11

Objectives

By the end of this lesson, students will:

- Learn the benefits of composting and vermicomposting
- Understand the four components needed for successful compost
- Build a proper compost pile
- Observe and understand the contents of a compost pile
- Observe and understand the function of a worm bin

Outline

1. Introduction
2. Compost observation and drawing
3. Compost pile building and worm bin observation
4. Check the status of the garden

Supplies (*The following supplies are in the garden shed*)

- Poster: “Do the Rot Thing...Compost!”
- Laminate: photo of a landfill
- Laminate: decomposers in the compost pile
- Laminate: “Compost Do’s and Don’ts”
- 2 + watering cans
- Pitchfork or hand cultivator tool
- Clipboards
- Hand cultivator tool
- Whiteboard and dry erase marker/s
- 2 trays
- Compost samples from the composters
- Book: *Compost Stew*
- Magnifying lenses
- Tweezers

DOCENT PROVIDES:

The following items will come from either a classroom collection or brought in by the docent. Some sources for collecting green materials are: Used coffee grounds, local café/restaurant, local grocer, neighbors.

- **Green materials, i.e. vegetable and fruit scraps, green leaves, green cut grass, coffee grounds (2 ½ gallons)**
- **Brown materials, i.e. dry leaves, dry grass, shredded newspaper/ brown paper bags, eggshells (5 gallons)**
- Blank paper from the classroom
- Markers, colored pencils or crayons from the classroom

Preparation

- Communicate with the helper docent or teacher that you will need their help supervising the compost building activity.
- Prepare the **Compost Observation** activity: Set up a station at the picnic tables with the whiteboard, dry erase marker/s, clipboards, paper and drawing tools. Draw an example on the whiteboard of what they might see in the compost. Spread a scoop of compost on each of the 2 trays and lay the magnifying lenses around them. If you have compost in various stages, prepare the trays to show the compost progress. Place the compost laminate and the book *Compost Stew* next to the trays.
- Prepare the **Compost Building** activity: At the composter, create a pile of green materials on one side and a pile of brown materials on the other (unless the kids are bringing greens and browns with them). Fill the watering cans and set out the pitchfork (see the below “Compost Building” activity diagram). Place the “Compost Do’s and Don’ts” laminate at the composter. Place the hand cultivator tool on top of the worm bin.
- Take out “Do the Rot Thing...Compost!” poster, the laminate of decomposers in the composter and the laminate of the landfill to be used during the Introduction.

INTRODUCTION 5 minutes

Gather students in the garden area for this discussion

Introduce the topic of compost to the students by first asking if any of them can tell you what **composting** is.

Answer: The process of composting is mimicking the natural process of plant materials breaking down into useful nutrients for growing plants.

Inform them that they are going to learn about why it is important to compost, what to compost and how to build a proper compost pile.

Ask them if they know **why** we compost.

Answer:

1. Reduces waste
2. Beneficial to soil
3. Saves money

1. Composting Reduces Waste

Grade	Talking Points
K - 2 ND Grade	<ul style="list-style-type: none">• Show them the laminate of the landfill and have them pass it around. "Everything that we put in the trash ends up in place called a landfill. There, the trash is buried in the ground for many years and is of no use to anyone; it's just taking up space. When we compost, we put organic waste to use and put less waste overall into landfills."• "Imagine what it would look like and smell like if all your trash from home was buried in the backyard."• "Just like reusing and recycling. We can think of composting as nature's recycling."
3 RD – 5 TH Grade	<ul style="list-style-type: none">• "Where would plant materials go if they didn't go in the compost?" <i>If they say "trashcan," say....</i> "Where does the trash from the trashcans go when the trash trucks have taken it away?" When plant materials go in the trashcan and get picked up by the trash trucks, they end up as waste, in a landfill with other trash, instead of becoming useful nutrients for our gardens or yards.• Show them the laminate of the landfill and have them pass it around. "Trash buried in landfills doesn't break down to become compost, but just stays there for many years. It smells bad and could cause air, soil and water pollution."• "We use our limited natural resources (gas in the trash trucks and land that contains landfills) to transport and process all this trash; this would be greatly reduced if all the plant material went into the compost!"

2. Composting is Beneficial to Soil

Grade	Talking Points
K – 2 ND Grade	<ul style="list-style-type: none">• "Compost contains nutrients that are vital to a healthy soil. What are nutrients?" Nutrients are particles or substances that are eaten by anything that's alive (living organisms) which gives them energy and helps them grow (building tissue).• "Can you guess how the nutrients get into the soil?" Scavengers and decomposers break down organic matter into smaller and smaller pieces until it's in a usable form for plants to access the nutrients.• "Compost is an example of the nutrient cycle at work. The nutrient cycle is the natural process of nutrients recycled from dead matter to living matter in a constant loop."

3 RD – 5 TH Grade	<ul style="list-style-type: none"> • “Compost contains both <i>macroorganisms</i> and <i>microorganisms</i>. Can anyone guess what the difference is between a <i>macroorganism</i> and a <i>microorganism</i>?” Macroorganisms are organisms that are large enough to see, such as pill bugs, earthworms or centipedes, while microorganisms are organisms that are so tiny, you need a microscope to see them. • “Both types of organisms break down organic matter and consume each other, into a usable form of nutrients for plants.” • “Compost improves the texture of garden soil: <ul style="list-style-type: none"> ➢ By adding compost to our soil, it replenishes nutrients that have been removed from the soil by other plants. ➢ It also adds moisture that all living things need to survive, and weighs down the soil, keeping it from blowing away or being rinsed away. ➢ Compost is loose and crumbly, which contributes to aerating the soil, vital to supporting the life of soil inhabitants.”
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3. Composting Saves Money

The healthier our soil is, the healthier our plants will be. When we make compost, we use it to **amend**, or *improve the health of*, the soil. If we didn’t make compost, we would have to buy it from the nursery to amend our soil. By making it ourselves, we save that money.

INGREDIENTS FOR A COMPOST BIN OR TUMBLER 5 minutes

Ask the students if they know which four ingredients the compost bin/tumbler needs to recycle organic materials into usable compost and allow for a few answers.

Answer:

1. Air
2. Water
3. Green materials
4. Brown materials

Why? Because there is life in the compost bin and all life needs food, air and water to survive. The organisms that live in the compost bin are called **decomposers**, which are small living organisms that eat organic waste. We are, in fact, “feeding our decomposers” --- like taking care of pets. Without the decomposers, organic matter would not break down, but would just pile up!

Show them the poster called “Do the Rot Thing...Compost!” Point to the drawing where it says: “Greens, browns, air and water.”

- On the poster, point to the contents in the bin. Tell them they will build a layer in their compost bin for one of their garden activities today.
- Explain that there is a “recipe” for making compost, which is 2 parts brown materials to 1 part green materials. If we use too many greens, they can rot, making the compost bin slimy and stinky, which attracts pests. If we use too many browns, there won’t be enough nitrogen (from green materials) to feed the decomposers and they will die off.
- Assure them that if the compost bin gets out of balance with either too many greens, or too many browns, it’s easy to fix! You just add more of the other ingredient (plus water if it’s dry) and stir. For example, if you have too many greens, you need to add browns.

Grade	Talking Points
K and 1 ST Grade	<p>Referring to the poster:</p> <ul style="list-style-type: none"> • “Who can give an example of <i>green materials</i>?” <p><i>Green materials are the fresh plants and plant parts that get put in the compost. They are rich in the element nitrogen. Examples include: fresh cut grass, vegetable scraps, fruit scraps, coffee grounds, manure and green leaves.</i></p>

	<ul style="list-style-type: none"> • “Who can give an example of <i>brown</i> materials?” <p><i>Brown materials are the dried, brown plants and other non-green things that are put in the compost. These are rich in the element carbon. Examples include dried grass, brown leaves, dead flowers and plants, even paper and eggshells.</i></p> <ul style="list-style-type: none"> • <i>On the poster, point out the F.B.I. (scavengers and decomposers). “This is an easy way to remember who’s in the compost bin: The FBI: Fungus, Bacteria and Invertebrates” (like worms, millipedes and pillbugs/sowbugs/rolliepollies, pincher bugs, centipedes...)</i>
2 ND - 3 RD Grade	<p><i>Referring to the poster:</i></p> <ul style="list-style-type: none"> • “In the compost pile, we have scavengers, physical decomposers, such as bugs, as well as chemical decomposers, such as fungi and bacteria. Decomposers eat the organic matter that we put in there, including each other!” <p>“Can you name any decomposers that we might see in the compost pile?”</p> <p><i>In the compost pile, you can see: Pillbugs/sowbugs/rollie pollies, pincher bugs, worms, centipedes, fungi....</i></p> <ul style="list-style-type: none"> • “Decomposers don’t all like to eat the same things. Some of them are carnivorous, or meat eaters, while others like animal waste. Some like dead bugs, while others prefer dry, dead plants. Fungi like to eat fruit and vegetables.” • “What would happen if we didn’t have decomposers?” <i>The earth would be covered in dead plants and animals.</i>
4 TH Grade	<p><i>Referring to the poster:</i></p> <ul style="list-style-type: none"> • “In the compost pile, we have scavengers and physical decomposers, such as bugs, as well as chemical decomposers, such as fungi and bacteria. Decomposers eat the organic matter that we put in there, including each other! “Decomposers don’t all like to eat the same things. Some of them are carnivorous, or meat eaters, while others like animal waste. Some like dead bugs, while others prefer dry, dead plants. Fungi like to eat fruit and vegetables.” • “What would happen if we didn’t have decomposers?” <i>The earth would be covered in dead plants and animals.</i> • “What are some other benefits to having decomposers in the compost bin?” <i>Decomposers also help keep the compost pile warm with their body heat AND aerate, or create air spaces, in the compost as they move around.</i>
5 TH Grade	<p><i>Referring to the poster:</i></p> <ul style="list-style-type: none"> • “In the compost pile, we have scavengers and physical decomposers, such as bugs, as well as chemical decomposers, such as fungi and bacteria. Decomposers eat the organic matter that we put in there, including each other!” • “Can you name any decomposers that we might see in the compost pile?” <i>Pillbugs/sowbugs/rollie pollies, pincher bugs, worms, centipedes, fungi...</i> • “Decomposers don’t all like to eat the same things. Some of them are carnivorous, or meat eaters, while others like animal waste. Some like dead bugs, while others prefer dry, dead plants. Fungi like to eat fruit and vegetables.” • “What would happen if we didn’t have decomposers?” <i>The earth would be covered in dead plants and animals.</i>

- “What are some other benefits to having decomposers in the compost bin?”
Decomposers also help keep the compost pile warm with their body heat AND aerate the soil as they move around.
- “How do decomposers help plants?”
They decompose organic materials into smaller parts that plants can use for accessing nutrients.
- “Does anyone know the difference between a scavenger and a decomposer? Try to guess by thinking about what the word **scavenge** means.”
Scavengers eat dead plants and animals, breaking them into smaller pieces. This creates more surface area for the decomposers to take over and finish breaking the organic matter down into usable nutrients for plants to use.

COMPOST ACTIVITIES 20 minutes

Let students know that they will be doing two activities today: Compost Building and Compost Observation. Split them in two groups and send one group with the parent helper/teacher to the Compost Building Activity and take the other group to the Compost Observation Activity.

Compost Observation Activity 10 minutes

- Show the example drawing on the whiteboard complete with labeled decomposers, greens and browns and point out a few examples of each.
- Point to the trays of compost in the middle of the picnic tables, telling them that you scooped it from their compost bin. Have them sit around the trays in small groups to observe the compost with magnifying lenses. There won't be enough room or lenses for all students to observe at once, so have each student spend 1-2 minutes observing before passing the magnifying lens.
- The students that are waiting can get started on their drawing by drawing the bin, anything that they can see in the sample without a lens, the compost, putting their name on the paper, etc., until they get a turn with the lens. After they have observed the compost, they can add what they observed to their drawings.
- Have them color and label what's in their drawing, either by identifying the item, such as “green leaf” or “brown leaf,” or by identifying its role in the compost, such as “green material.” Older kids can add “Nitrogen” or “Carbon” next to it. Feel free to help label pictures for younger grades if needed.
- Remind them to label all the other parts of the compost pile also. Encourage them to draw specific materials like a banana peel, torn paper and an apple core.
- When drawing decomposers, they can label them by using specific names if they know them, such as “sow bug.”
- If you have more than one parent helper or if your teacher is available, use the *Compost Stew* book to show the kids while they are waiting for their turn to use the magnifying lenses. If the students are older, they can read through the book independently.

During the compost observation, explain that there are three levels of consumers in a compost pile:

1. The **First Level Consumers** are referred to as primary consumers, which feed on dead plants or animals. These are the bacteria, fungi, snails, worms, woodlice, sow bugs.
2. The **Second Level Consumers** feed on primary consumers and their waste. These are the springtails, roundworms, rotifera, mites, mold and nematodes.
3. The **Third Level Consumers** feed on secondary consumers. These are the centipedes, rove beetles, ants, pseudoscorpions and predatory mites.

This is called a **Compost Food Web**. The different populations in the compost bin are kept under control, which makes for a healthy and balanced compost pile.

Sample Drawing:



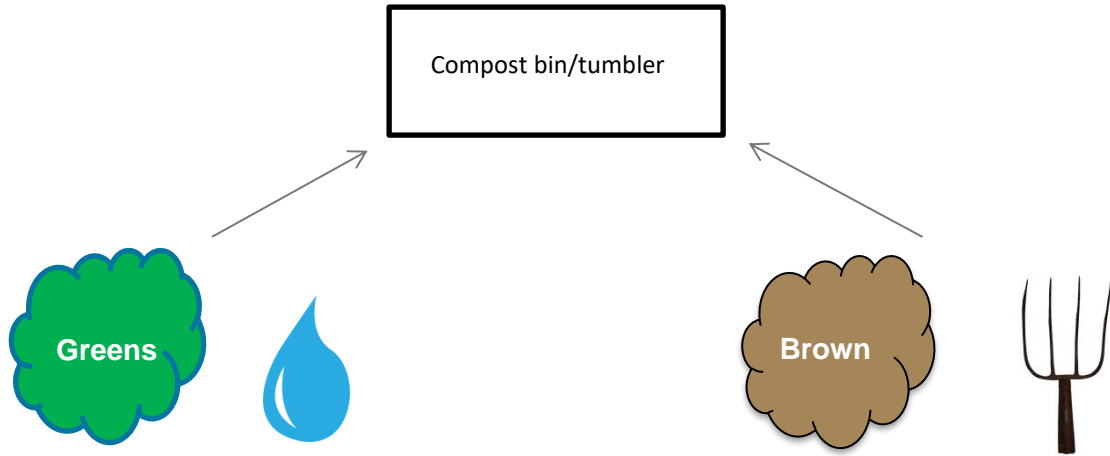
Compost Building Activity 7 minutes

Take the group to the compost area. Make sure that you only use **HALF** the materials, saving the other half for the second group.

- Have the students form two lines in front of the compost area (one in front of the greens/watering can, and the other in front of the browns/pitchfork, or hand cultivator tool.)
- Have one student from each line approach their pile. The student in front of the green pile will go first, putting in one scoop of greens **into the composter**.
- The student in front of the browns will then add two scoops of brown material.
- The student in front of the greens will sprinkle some water onto the pile.
- The student in front of the browns will give a stir with the pitchfork or cultivator.
- They will step away.

During this activity, share some of the “Did You Know? Fun Facts” on the next page with the students. When everyone has completed the composting building, switch with the other group and direct students to the compost observation activity.

Compost Building Activity Diagram



LINE 1

X

X

X

X

LINE 2

X

X

X

X

ALTERNATE BETWEEN BOTH LINES: CHILD IN LINE 1 ADDS ONE SCOOP OF GREENS, CHILD IN LINE 2 ADDS TWO SCOOPS OF BROWNS, CHILD IN LINE 1 SPRINKLES WATER, CHILD IN LINE 2 MIXES WITH PITCHFORK

WORM BIN OBSERVATION 3 minutes

After the students have made their compost, take them to see the worm bin. If you have enough parent helpers, you can have a parent helper at the worm bin showing the students the worms as they finish up their activities to cut back on crowding. The worms do not like light and will VERY quickly disappear under the layers below when you first lift the lid. Use the hand cultivator tool to GENTLY move the contents of the bin around to show the students any worms that are hiding below. Take a moment to describe the process of composting with worms, called **Vermicomposting** or **Vermiculture**:

- The worms in the worm bin are called **Red Wigglers** and they live in “bedding” made up of newspaper, shredded paper, or other compostable organic layering material. This gives them air space and retains moisture amongst its other benefits.
- We put kitchen produce scraps into the composter about once per week to feed them. They don’t like too much citrus, stems (like from grapes), or outer layers of onions. They eat half their own body weight in food EVERY DAY!
- They worm waste filters down into the layered bins below. The bottom layer contains the most-filtered liquid waste, nicknamed **Worm Tea**. The solid waste is called **castings**. Both the Worm Tea and the castings are full of nutrients that we use to fertilize the plants.

LESSON WRAP-UP AND GARDEN CHECK 5 minutes

Review what they have learned today. Pick a few questions and allow students to answer:

- What are the “FBI” are in the compost bin?
 - *Fungi, Bacteria and Invertebrates*
- What do the FBI do?
 - *They eat the materials in the compost bin AND eat each other. They also keep the bin aerated by moving around. This leaves behind a nutrient-rich amendment for the garden.*
- What might happen if we only put greens in the compost bin instead of mixing them with browns?
 - *It would rot and smell, attracting lots of pests.*
- If the compost starts to stink from too many greens and not enough browns, how would we fix it?
 - *Add browns and mix well.*
- If the materials in the compost aren’t breaking down over time, and look like a bunch of dried plants each time that you check it, what might the problem be?
 - *There’s a good chance that there is too much carbon, or “browns.” Another reason might be that the pieces are very large in size.*
- How can you fix the problem of too many large pieces of carbon/browns?
 - *Chop the pieces up to create more surface area, add “greens” or nitrogen, sprinkle with water and mix well.*
- What are some of the reasons that we compost?
 - *To reduce waste*
 - *Create nutrient-rich amendment for the soil*
 - *Save money*
- What are the 4 ingredients for composting?
 - *Air, water, greens and browns.*
- Name some examples of greens? Of browns?
 - *(Refer to “Compost Do’s and Don’ts” laminate)*

Point out to them that composting and vermicomposting is easy, and they can do it at home. If they are interested in becoming more involved with either one, check with your Lead Docent to see if there are any opportunities on campus.

Take them to see how the garden is growing before going back to class. Thank the teacher and the parent helper. Collect the Compost Observation drawings and use them as the reflection papers. Put them in the LiveWell Kids box in the school office. If they want to take them home, please take a few photos first.

Did You Know? – Fun Facts

DECOMPOSERS

- Worms lay eggs or “cocoons,” which are shaped like a lemon—worms come out the ends. Inside a cocoon are 2-3 baby worms.
- Worm eggs can stay dormant in soil or compost for up to 15 years! They’ll wait to hatch when conditions like moisture and food to be good enough to support their life.
- Worms eat half their body weight each day.
- Worms have no eyes, no ears and no teeth, but they have 5 hearts and breathe through their skin.
- If you cut worms in two - THEY DIE! It's an "urban myth" that worms survive as two worms when cut into two bits.
- Compost worms sometimes make a snap-crackle-pop sound.

COMPOST

- The average US. household generates 650 lbs. of compostable materials each year.
- Composting requires that your pile is “alive,” which means having the correct amounts of food and moisture. You can think about it is as “taking care of your pets!”
- A compost pile can reach 150 degrees Fahrenheit, which is all body heat given off by the decomposers.
- Compost and soil are alive, made up mostly of living things! In fact, there are more micro-organisms in a teaspoonful of soil than there are humans alive on the planet.
- The compost is made by “heaters:” bacteria & fungi) and “chompers:” worms, beetles and woodlice. The “heaters” work first and break down the softer food and then the “chompers” eat the tougher material.

Resources

- <http://extension.psu.edu/plants/gardening/news/2013/some-composting-facts>
- http://www.bbg.org/gardening/composting?gclid=Cj0KEQIAqemzBRDh2vGKmMnqoegBEIQAgjPuYKcFnrc5ih3fl_dkrRds5Rx7cJfNfa6F5XVxySvs1kaAgUD8P8HAQ
- <http://www.planterspalette.com/wp-content/uploads/2009/04/composting-and-vermiculture-interesting-facts-about.pdf>
- <http://kids.niehs.nih.gov/explore/reduce/worms.htm>
- http://www.capitalregionrecycling.com/Libraries/Flyers_Publications/CompostCapRegWeb3_Final.sflb.asfx
- www.all-recycling-facts.com
- www.compost-bin.com
- www.greemsalem.com
- www.yourgardeningfriend.com
- www.ecowatch.com
- www.reateyourowneden.org.nz
- www.dosomething.org
- www.someinterestingfacts.net
- www.rediscoverycentre.ie
- www.keenforgreen.com
- www.acespace.org
- www.planterspalette.com
- www.capitalregionrecycling.com
- www.funkidslive.com
- <https://learn.eartheasy.com/articles/worm-composting-basics-forbeginners/>

Appendix A

- Next Generation Science Standards for California Public Schools, Kindergarten through Grade Twelve-Grade Five (CA NGSS)
- Writing 8- With guidance and support from adults recall information from experiences or gather information from provided sources to answer a question.
- Speaking and Listening 6- Speak audibly and express thoughts, feelings and ideas clearly.
- Life Sciences 1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive
- Earth and Space Sciences 2-2 Be able to construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs
- Life Sciences 4-1 Make observations of plants and animals to compare the diversity of life in different habitats
- Writing 3 - Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.
- Writing 8- With guidance and support from adults recall information from experiences or gather information from provided sources to answer a question.
- Speaking and Listening 6- Speak audibly and express thoughts, feelings and ideas clearly.
- Life Sciences 1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive
- Earth and Space Sciences 2-2 Ability to construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs
- Life Sciences 4-1 Make observations of plants and animals to compare the diversity of life in different habitats
- 5- Matter and Energy in Organisms and Ecosystems
- 5- LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers and the environment. [Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.] [Assessment Boundary: Assessment does not include molecular explanations.]
- 5- LS2 Ecosystems: Interactions, Energy, and Dynamics
- 5- LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers and the environment. [Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.] [Assessment Boundary: Assessment does not include molecular explanations.]
- 5- ESS3 Earth and Human Activity 5-ESS3-1.Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.
- 5- PS1 Matter and Its Interactions/ 5- PS1-1. Understand that matter is made of particles too small to be seen.
- Source: ("K-8 Next Generation Science Standards in the Garden." Www.lifelab.org. 2013). http://www.lifelab.org/wp-content/uploads/2013/12/K-8-NGSS_In_the_Garden.pdf
- 1.5.P - Identify practices that are good for the environment, such as turning off lights and water, recycling, and picking up trash.
- Source: (This is from 2008 and is listed as an old standard)
- 1.5.P - Identify practices that are good for the environment, such as turning off lights and water, recycling, and picking up trash.
- Health Education Content Standards for California Public Schools Kindergarten Through Grade Twelve
- Grade One Standard 1: Essential Concepts - (Growth and Development) 1.1.G Describe how living things grow and mature.
- Grade One Standard 1: Essential Concepts - 1.8.P Identify materials that can be reduced, reused, or recycled.
- Grade Three Standard 1: Essential Concepts - (Growth and Development) 1.1.G Describe the cycle of birth, growth, aging, and death in living things.
- Grade Three Standard 1 - (Personal and Community Health) 1.6.P Discuss how reducing, recycling, and reusing products make for a healthier environment.
- Grade Three Standard 7 – (Practicing Health - Enhancing Behaviors) 7.2.P Demonstrate ways to reduce, reuse, and recycle at home, at school, and in the community.
- Grade 5 Standard 1: Essential Concepts (Personal and Community Health) 1.6.P Explain that all individuals have a responsibility to protect and preserve the environment.
- Grade K: Asks and answers questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- Grade K: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- Grade 1: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- Grade 2: Asks and answers questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- Grade 2: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- Grade 3: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.
- Grade 4: Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
- Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher- led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.
- Grade 5: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- Participate in shared research and writing projects (e.g. ...record science observations)
- Source: ("Common Core Math and English Language Arts Standards." Www.lifelab.org. 11 Dec. 2013). <http://www.lifelab.org/wp-content/uploads/2013/12/CommonCoreConnections.pdf>