SPROUTS' MONTHLY BOOK

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February 2026 Monthly Book

Inside the Compost Bin

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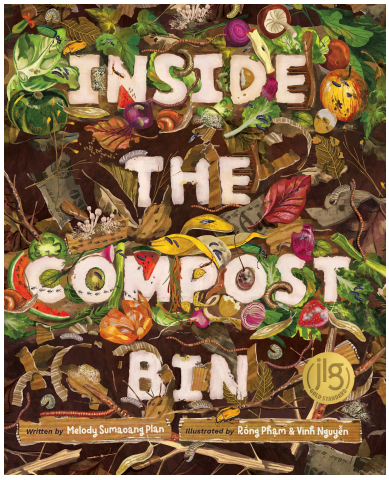
Illustrated by: Rong Pham & Vinh Nguyen

Grade Levels Suggested: Fifth

Lesson by: Allison Whiten



From creation of the "compost cake" to curing, and finally, using the compost, budding composters will discover what it takes to have a successful bin—as well as the plethora of benefits a compost bin can have to the surrounding environment. Master composter, Melody Sumaoang Plan, shows readers the physical, biological, and chemical processes involved and rich illustrations take them deep inside the murky bin.

Scan here for Lesson Slides!

Science Lesson

Grade Level:

- Fifth

Standards Addressed:

- **5-LS2-1.** Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Objective of the lesson:

- I can develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

National Agricultural Literacy Outcomes:

- b. Explain how the interaction of the sun, soil, water, and weather in plant and animal growth impacts agricultural production. (T1.3-5)
- e. Recognize the natural resources used in agricultural practices to produce food, feed, clothing, landscaping plants, and fuel (e.g., soil, water, air, plants, animals, and minerals) (T1.3-5)

Materials list:

- Computer
- Projecting screen
- Pencil
- Paper

Instructor procedure:

- The teacher will read the I can statement:
    - Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- The teacher will review the vocabulary:
    - Air: the invisible mix of gases (mostly nitrogen and oxygen) all around Earth that we need to breathe, plants need to grow, and that fills up balloons and kites, with wind being moving air that helps with weather, making it essential for life and fun activities
    - Animals: living things that move around, eat food (plants or other animals) for energy, sense their surroundings, and grow
    - Bacteria: super tiny living things, smaller than anything you can see, that are made of just one cell and live everywhere, even in and on you
    - Decomposer: Decomposers are nature's recyclers, acting like tiny, living garbage disposals that break down dead plants, animals,

and waste into nutrients for the soil. Examples include bacteria, fungi (mushrooms), and worms, which keep the Earth clean by recycling dead matter into food for new plants to grow.
    - Earth: our home planet, the third from the Sun, and the only one we know of with life, thanks to its water, air, and perfect temperature
    - Ecosystems: like a big neighborhood for plants, animals, and tiny living things, plus non-living things like water, rocks, and soil, all working together in one area, like a forest, pond, or even a small garden
    - Environment: everything around us: the air, water, land, plants, animals, and even the weather, including things people build like houses and schools
    - Interact: when two or more things—like objects, chemicals, or living creatures—act upon, affect, or change each other
    - Matter: "stuff" that takes up space and has weight
    - Organism: any living thing, including plants, animals, fungi, and bacteria
    - Plants: a living thing that stays in one spot, needs sunshine, water, and air to live, and makes its own food using sunlight, like grass, flowers, and trees
    - System: a group of parts that work together as a team to do something bigger.
    - Water: a clear, essential liquid we drink to stay healthy, use for washing and playing, and see as rain, rivers, and oceans, made of tiny hydrogen and oxygen atoms (H_2O) that move in a cycle, making life on Earth possible for everyone
- The teacher will read *Inside the Compost Bin.*
    - As the teacher reads, the class will collaborate to make an anchor chart modeling the movement of matter that is exemplified throughout the book.
- The teacher will explain that students will make a model of the matter moving throughout the compost system to show the movement of matter among the plants, animals, decomposers, and the environment.
- The teacher will the rubric for the matter model poster project
- Question/Sentence Stems

    - In the model of this system, the cycling of matter _____.
    - In the model of this system, the cycling of energy _____.
    - The key components of the system are _____.
    - In the system, _____ and _____ interact in _____ way.
- The teacher will end class with an exit ticket. The students will answer,
    - In the system, the decomposers and the soil interact in _____ way.

Assessment:

- **Assessments**
    - Informal:
        - Exit ticket
    - Formal
        - Matter model poster

Additional resources which enhance the lesson:

- **Activities:**
    - Construct a Compost Bottle
    - Make Your Own Worm Bin
    - The Garden Show (Musical Play)
- **Resources:**
    - Vermiculture
    - IDEM: Environmental Education: Vermicomposting: A Starter's Guide for Teachers
    - Worm Farm
    - Backyard Composting
    - Worms Eat My Garbage
    - Indoor Gardening Curriculum
- **Books**:
    - Compost Stew
    - Composting: Nature's Recyclers
    - Diary of a Worm
    - Dirt: The Scoop on Soil
    - The Magic School Bus Meets the Rot Squad: A Book About Decomposition
    - Up in the Garden and Down in the Dirt

    - We Dig Worms!
    - Wiggling Worms at Work
    - Worm Makes a Sandwich
- **Additional Lesson Plans:**
    - Working Worms – Curriculum Matrix | National Agriculture in the Classroom
    - Vermicomposting (Grades 3-5) – Curriculum Matrix | National Agriculture in the Classroom
    - The Rotten Truth • Grades 3 – 5
    - October 2024 Monthly Book
    - September 2025 Monthly Book
- **South Carolina Agricultural Information**
    - State Agricultural Facts
    - TOP COMMODITIES
    - Teacher Center | National Agriculture in the Classroom
    - Food & Farm Facts | South Carolina Farm Bureau

Resources:

Statements	On the back of the poster, the student must make make at least two statements concerning their poster using two of the sentences stems below. • In the model of this system, the cycling of matter _____. • In the model of this system, the cycling of energy _____. • The key components of the system are _____. • In the system, _____ and _____ interact in _____ way.	/5
Matter	The matter cycle shows the movement of matter among the among plants, animals, decomposers, and the environment.	/5
Rough Draft	Rough draft is provided with edits shown.	/5
Presentation	The poster is neat, colorful, and shows best effort	/5
Total: /20		

References:

Benchmarks related to agricultural literacy and academic … National Agricultural Literacy Outcomes. (n.d.). https://cdn.agclassroom.org/nat/data/get/NALObooklet.pdf

Standards. South Carolina Department of Education. (n.d.). https://ed.sc.gov/instruction/standards/

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