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Ideas with **IMPACT**



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Indoor Sensory Garden

Indoor Sensory Garden



Alena Sheriff

asheriff@dadeschools.net

Twin Lakes Elementary School

School code # 5601

For information concerning Ideas with IMPACT opportunities including Adapter and Disseminator grants, please contact: Audrey Onyeike, Program Director Ideas with IMPACT The Education Fund 305-558-4544, Ext. 113 Email: audrey@educationfund.org www.educationfund.org

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Goals and Objectives

The 2021-2022 school year has been a challenge for both teachers, students and the community on a whole. With the rise of mental health disruptions in our school culture, there is a need for social and emotional health care. From my observation, I have noticed that educators are seeking alternative ways to encourage self care and stress relieving outlet for themselves and their students. The idea of creating an indoor sensory garden was inspired by our school's Food Forest which boast a plethora of edible plants and magical outdoor spaces for students and teachers to seek peace and gratitude for our environment.

The goal of "Indoor Sensory Garden " was to help students destress and cope with social and environmental changes. The main objective of the project is to give students a soothing, aromatic and therapeutic experience in planting and caring for their succulent plants. This also leads into a great lesson of teaching students about plant adaptation as students explore the characteristics of succulent plants. In addition, students will also benefit from having an outlet to express their creative and artistic side. Students will experience sensory skills by using hands-on activities that helps them manipulate a variety of materials and scents.

Florida Standards

Science Standards: SC.3.L.14.1: Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction. SC.3.L.14.2: Investigate and describe how plants respond to stimuli (heat, light, gravity), such as the way plant stems grow toward light and their roots grow downward in response to gravity. Benchmark SC.3.L.17.2: Recognize that plants use energy from the Sun, air, and water to make their own food. Benchmark SC.3.N.1.1: Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations. Benchmark SC.4.N.1.8: Recognize that science involves creativity in designing experiments.

Language arts standards: LACC.3.W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

LACC.3.SL.1.1 Engage effectively in a range of collaborative discussions

(one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- d. Explain their own ideas and understanding in light of the discussion.

SS.3.A.1.2 Utilize technology resources to gather information from primary and secondary sources

Course outline and overview

Students will learn what are succulent plants and why do they make great indoor decor for the classroom. We will be working with commonly known succulents i.e as echeveria, cacti, haworthia and jade plants that readily accessible in garden centers.

Understanding succulents: Students will learn that succulents are plants that has a lot of fleshy stems and leaves where they store their water. Their natural environment is in the desert where there is little rainfall or access to water. The plants grow best in a rocky and sandy soil. Students will be made aware that water availability is a challenge for succulents therefore they must rely on the adapted ability to store water to survive.

Growing succulents indoors

Succulents makes great indoor plants because of their natural ability of adaptation they have developed to help them survive in their environment. Be mindful with succulents growing indoors in the ac as it creates a condition that is a different environment than what the plants are accustomed to outdoors. The air becomes drier and succulents will inheritantly begin to loose water in dry air. Succulents are self sufficient plants and they don't require much care given the right conditions. Be sure to water every two week, provide source of light and the soil must be well drained and no over watering.

Remember that succulents are adapted to low water conditions therefore it is important to provide them with good drainage.

Lesson Plan

Day 1:Nature walk

Take students out on a nature walk around the school. If you have a Food Forest or a garden even better. Have them experience nature and being outdoor all while being conscious about their environment. Upon returning to the classroom, give the students the opportunity to express their feelings and experience about nature. Have them jot down in their science journal what was special about being outdoors.

Day 2: Let's talk about succulents!

Watch video segment on Discovery. It teaches that desert plants are often swollen, spiny, rarely-bright green, and have tiny leaves. The segment also identifies agave, aloe, cacti, elephant trees, and many euphorbias as succulent plants, and dissects some of the main features of desert plants. Link provided below.

<https://dadeschools.discoveryeducation.com/learn/videos/dfaf5e5e-14c1-4d97-b37d-33183b017b0e>

As a video follow up have student write in their journal books notes about what they know, and what they learned and what they wanted to know about succulent plants. Review with them key information about what they learned about succulent plants.

Day 3: Hands on succulents exploration

Students will have the opportunity to further explore the adaptations of succulents by giving them an aloe plant or succulent sample to observe. Engage students in conversation by having them compare and contrast plants observed on their nature walk and succulent plants. Put students in small groups for observation of the plant sample. Give students magnifying glass, tell them to feel, touch and possibly tear the plant to see what happens. Use template below to have students copy and record their data in journal book..

Plant Adaptation Observation

Plant name	Draw a picture of a leaf of your plant	How thick are the leaves?	What do the edges of the the leaf feel like?	Tear a leaf in half. Do you feel any liquid?	Do you think this is a succulent? Tell why.

Day 4: Choosing the right essential oils to scent lava rocks

Essential oils are derived from the distillation process of plant matter. Each scent creates a mood or sense of good feeling when used.

1. Students will brainstorm what mood they want to promote before they choose a scented oil. Below are three types of mood a specific oil promotes.

2. Students will choose from one of the following moods below:

-relaxation

-focus

-memory

3. Student will learn about the essential oils and its scent that will be used to enhance one of the following three moods mentioned above.

The essential oils for relaxations are : orange, which is uplifting and good for feelings of being overwhelmed; lavender oil is very calming.


The essential oils for focus are: peppermint, and lemon. These oils spicy and fragrant scent helps to wake up the mind, focus your senses, and

Improves your memory. The essential oils for memory are: sage, basil, and rosemary.

Due to the strong smells of these oils, the mind becomes more alert making it easier to remember things and concentrate better.

Day 5: Making a Diy aromatherapy Succulent planter

First, have students watch this video for tips : Discuss tips with students

 [Succulent Tips for Beginners // Garden Answer](#) this video shows tips on how to care for your succulents.

Day 5 / 6 Diy aromatherapy succulent planter

 [Succulent Essential Oil Diffuser DIY : How to Make a Succulent Diffuser Using Lava Stones](#)

After watching video have student prep their desks to get ready to create their succulent project.

1. Cover desks with newspaper or butcher paper to protect it from soil and other mess.
2. Add 3-4 drops of essential oil of your choice to lava rocks. **Put rocks on a paper plate as seen in video and let oils dry to absorb first. Set aside.
3. Fill planter pot with succulent soil mix.

4. Add the succulent plant in the planter. Add extra soil around the succulent. Add water using a sprayer bottle so as not to over water your plant.
5. Cover the soil with small pebbles .
6. Add the lava rocks by placing one or two on top of the pebbles.
7. Enjoy Your succulents!!!! Put on the window sill in the classroom when not being cared for by the students.

**The scent could last anywhere from a few days to week or more. Add more oils to the lava rocks when the scent starts to fade following the aforementioned process above for scenting lava rocks.

Materials

1. Paper plates
2. Paper towels
3. Sprayer bottles
4. Small pebbles
5. Medium size lava rocks
6. Essential oils
7. Succulent plants
8. Planter pots with drainage
9. Succulent soil mix
10. Pop cycle sticks (optional)

Resources

Find Succulents on amazon or garden centers i.e. Home Depot, Lowes, Walmart.



https://www.amazon.com/Shop-Succulents-Assorted-Collection-Succulent/dp/B01LXPI743/ref=sr_1_6?crid=UI4D47JHPFO3&keywords=succulents+plants+live&qid=1658413976&srefix=succule%2Caps%2C118&sr=8-6

The link above is for amazon that gets you 20 plants for 27.99

Small Pebbles can be purchased in dollar stores, Michaels and garden centers and Amazon. You can get a bag for \$6-\$20 depending on your choice.



Lava rocks can be purchased at Home Depot \$14.98 a bag

Essential oils can be purchased at Nutrition Smart, Whole Foods or get a kit from



Amazon.

Small planter pots can be purchased at Home Depot, Walmart, Loews, or any garden centers.

Links for other sites

Handmade planters ideas: [5 DIY Indoor planters Ideas | Creative Plant Pots From Waste Material](#)

small metal succulent planter diy: [Make Succulent Teacup Gardens Using Cuttings](#)

