

“Growing Our Minds”

K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

2-LS2-1 Plan and conduct an investigation to determine what plants need to grow.

2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

While students are in second grade, students will research to determine what plants need to grow. We will investigate, create, and observe plants in all stages of their life cycle through planting a garden. As classes, we will discuss how each season is different and can affect what a garden needs to thrive. Students will plant the seeds, water the garden, weed unwanted plants, and overall maintain the garden, to help the crops grow until we harvest. Students will be led in class discussions on how the animals are helping to pollinate the plants, to help them grow their fruits and vegetables.

Starting in kindergarten, students are learning about plants through observation and discussion. Students build on this knowledge in first grade where they learn the parts of a plant and how those parts help the plant grow.

Once students are in second grade, they are ready to build on their prior knowledge. Learning through hands on opportunities will strengthen their understanding. Before planting, students will conduct research on their laptops about what plants need to grow, what plants grow in each season, and how to maintain those plants and a garden properly. As a grade level, we will have a guest speaker come in to talk about what plants grow best during each season. Students will then select which seeds will be planted and which plants go best together during this guest speaker visit.

To bring in the engineering part of STEM, second grade students will start out by drawing a diagram to create a blueprint of what they expect to plant in certain garden areas. Second grade students will be required to maintain a journal that tracks their journey of being gardeners. Classes will plant the seeds in the classrooms at first, once the seeds germinate, we will transfer them to the garden outside. Once the seed sprouts through the dirt, we will measure the plants weekly and record the data in our notebooks. In their garden journal, they will document their observations and draw the different stages of their plants over time. Students will write about animals they see and how those animals help or hurt the garden. This notebook will be completed over the several months that we will be working in the garden. Once our garden is complete, we will pull all the old plants out and get it ready for the next planting. Students will write a reflection of what worked, what didn't and what needs to be different. In the end, students will have an in-depth weekly notebook covering the preplanning, duration of the gardening, and reflection.

While second grade classes are growing the garden, kindergarten and first grade classes can use the garden to guide them in their plant units. If we are successful in growing items from the

garden, we will then harvest the fruits of their labor and have a Healthy Picnic Day. Their gardening journals will be displayed at the Healthy Picnic Day for students and staff to learn from.

Budget and items needed:

We will need the following items to establish our garden and “Grow Our Minds” .

Raised garden beds: 12 at 69.94=839.28

<https://www.homedepot.com/p/70-86-in-x-11-42-in-Oval-Large-Metal-Raised-Planter-Bed-Outdoor-Garden-for-Planting-Silver-GardenBed-gfq15/329906968>

Soil palette 649.00

<https://www.homedepot.com/p/Back-to-the-Roots-Organic-Bulk-Garden-Soil-Pallet-60-1-cu-ft-Bags-47011/324137866>

Fertilizer 12 @ 28.97 = 347.64

<https://www.homedepot.com/p/Espoma-Garden-Tone-27-lb-Organic-Herb-and-Vegetable-Fertilizer-3-4-4-100520770/205601353>

Weed barrier 5 at 42.98= 214.90

<https://www.homedepot.com/p/Agfabric-3-ft-x-100-ft-Landscape-Fabric-Weed-Barrier-Ground-Cover-Garden-Mats-for-Weeds-Block-in-Raised-Garden-Bed-GC3003100B0/315527079>

Hose sprayer 5 at 40.34= 201.70

<https://www.homedepot.com/p/10-Pattern-Spray-Lawn-Modes-High-Pressure-Water-Gun-Hose-Nozzle-for-Garden-and-Car-Washing-Multi-Function-Handheld-Tool-HDSA01-1OT194/329312175>

Landscape staples 2 at 14.99= 29.98

<https://www.homedepot.com/p/Southwest-Boulder-Stone-6-in-Heavy-Duty-Steel-Garden-Staples-for-Weed-Barrier-Landscape-Fabric-Irrigation-Lines-and-Sod-100-Pack-02-0168/312645120>

Storage bench 2 at 181.32= 162.64

<https://www.homedepot.com/p/Keter-Solana-2-Person-Brown-Outdoor-Resin-Storage-Bench-250294/316888443>

Hose 5 at 49.98=249.90

<https://www.homedepot.com/p/Teknor-Apex-Neverkink-5-8-in-x-100-ft-Heavy-Duty-Garden-Hose-8605-100/100661317>

Sprinkler timer 2 at 54.97= 109.94

<https://www.homedepot.com/p/Orbit-6-Station-Easy-Set-Logic-Indoor-Outdoor-Sprinkler-Timer-57896/202206745>

soaker hoses 12 at 39.98=479.76

<https://www.homedepot.com/p/Swan-SoakerPro-3-8-in-x-100-ft-Heavy-Duty-Soaker-Hose-System-CELSPAK38100CC/310333284>

seeds variety pack 42.91

<https://www.homedepot.com/b/Search/N-5yc1vZc8qL/Ntk-Extended/Ntt-seeds?Ntx=mode+matchpartialmax&NCNI-5>

Seeds variety pack 19.47

<https://www.homedepot.com/p/Back-to-the-Roots-Organic-Leafy-Greens-Vegetable-Seeds-Variety-5-Pack-50072/314648944>

Seeds 2.79

<https://www.homedepot.com/p/Burpee-Pumpkin-Small-Sugar-Organic-Seed-57016/202253917>

Seed starting 12 at 12.47=149.64

<https://www.homedepot.com/p/Jiffy-72-Peat-Pellet-Pro-Seed-Starting-Greenhouse-with-SUPERthrive-J372PROGS-20H/313965632>

Gardening tools 25 at 11.98=599.00

<https://www.homedepot.com/p/Anvil-3-Piece-Wood-Handle-Garden-Tool-Set-GD210308/317444284>

Gardening gloves youth 40 at 11.99= 479.60

<https://www.homedepot.com/p/G-F-Products-Soft-Jersey-Kids-Green-Red-Blue-Gloves-3-Pair-1823-3/202710225>

Gardening gloves adult 5 at 6.67= 33.35

<https://www.homedepot.com/p/Digz-Digs-Women-s-Large-Nitrile-Glove-3-Pack-73837-024/318747799>

Tomato cage 5 at 4.98 = 24.90

<https://www.homedepot.com/p/42-in-Ring-Tomato-Cage-89748HD/323365048>

Bean trellis 69.99

<https://www.homedepot.com/p/Outdoor-Essentials-Contemporary-48-in-Walnut-Tone-Hog-Wire-Trellis-418751/313618289>

Gardening bag 42.30

<https://www.homedepot.com/p/Pure-Garden-16-in-Folding-Garden-Stool-with-Garden-Bag-and-Tools-M150062/300953240>

Garden shears 15.48

<https://www.homedepot.com/p/Fiskars-6-in-Titanium-Micro-Tip-Pruning-Shears-with-Softgrip-Handles-399242-1003/307818019>

Hose holder 2 at 30.62= 61.24

<https://www.homedepot.com/p/LIBERTY-GARDEN-Tree-of-Life-Hose-Hanger-673-A/318558450>

seed starting planting cups 24 @ 5.97=143.28

<https://www.homedepot.com/p/Back-to-the-Roots-Organic-and-Plantable-Seed-Starting-Pots-24ct-49001/324138343>

Storage container 30.55

https://www.amazon.com/Inhouse-Storage-Plastic-Latching-Container/dp/B08N9ZXYNM/ref=sr_1_7?crid=26TUUYP8TZ7CO&dib=eyJ2IjoiMSJ9.7XRrLZFSMvf1nFQaTkqXE0-3Q3CIN_njWS2zY7Jm0_GSW_Upxz6aE6KIDPfmzUI-0uvCKZq45DDvaVfOQKIKd09Ur-Q7OuxoaDQD6TQVVPM1o3M8cr3cFk8G57qCn7H3-01GQLL9rm9T25Cn6ytzYJ6fXC8b6ISIZ9PhDYt3N2DoWQbCzVA5Y5NCiRQI3baNHliBQyit8GutNDU-fo4wc_ToKUKIGcT-YpME5loPEeKWL_qZxsCfdmryMAjXLUMvpkR41IkGXUNJkDpJ3kxJY3JfswrVZXQqIVbQ_6mCc.LY7id5LA9GtgoOnSO8wMnI8nOU_qRyjdthvMmbhf_ww&dib_tag=se&keywords=storage+bins+with+lids+medium+size&qid=1714420549&srefix=storage+bins+with+lids+medium+sizew%2Caps%2C136&sr=8-7

Total: 4,999.20