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| Woodland S.T.E.A.M. Integrated Plan | |
| Grade Level: First Grade | Time Frame: Three Weeks |
| Ask: How can we, as botanists and landscape architects, design a garden that provides for plant needs and provides a function (sensory, rock, vegetable or fruit, flower). | |
| Focus Standards  Math:  Science:  ELA:  Social Studies:  Art:  Music: | |
| Essential Question(s)  *How can we, as botanists and landscape architects, design a garden that provides for plant needs and provides a function (sensory, rock, vegetable or fruit, flower).* | Key Vocabulary Terms  *Plants, roots, stems, leaves, flowers, soil, nutrients, climate, shade, sun, garden, blueprint, scale, rock garden, sensory garden, vegetable garden, fruit garden, flower garden.* |
| Technology Needed  *iPads, Interactive Projectors* | Supplies Needed  *Garden cost sheets, Budget sheets, plant mazes, plants, soil, cups, beans, Ziploc bags, garden planning paper, posters* |
| Teaching the Target  Plan:  Week One:  Day One:  Reading: Read *Tiny Seed* by Eric Carle. Describe characters.  Science: students will plant little seeds and/or sprout houses.  Day Two:  Reading: Read *Tiny Seed* by Eric Carle. Describe setting.  Science: Does the size of the seed determine the size of the plant? Parts of plant buffet. SW discuss what they notice about the food (celery, carrots, spinach, broccoli, sunflower seed)  Writing: Students will create their own story about a seed.  Day Three:  Reading: Watch *Sid, the Seed* video and describe characters (connect to personification). <https://www.youtube.com/watch?v=jm12JKhNnWY>  Science: Visit to garden or butterfly garden. Students will observe plant leaves, stems, etc. and draw on recording sheet (*Plant Parts Recording Sheet*).  Writing: Students continue their own story about a seed.  Day Four:  Reading: Review *Sid, the Seed* and describe setting. Connect to plant study.  Science: Students will discuss plant needs in our garden.  *Do our gardens meet all the needs of the plants? If not, what else do they need?*  Writing: Students continue their own story about a seed.  Day Five:  Reading: Compare and contrast characters, setting, fiction vs. non-fiction (plot for advanced students) in *Tiny Seed* and *Sid, the Seed*.  Science: Teacher will play Plant Needs Song by Harry Kindergarten.  <https://www.youtube.com/watch?v=dUBIQ1fTRzI>  Students will start controlled experiment with needs of plants.  Writing: Students complete story about a seed.  Week Two:  Day One:  Reading: *Science Studies Weekly (Week 2) Plants* – use whole group or as a station.  Science: Students will go to gardens and talk about different kinds of plants they see in the gardens.  Writing: *Create a Plant* informational writing sheet (in Science folder on DropBox). Use whole group or as a station.  Day Two:  Reading: *Science Studies Weekly (Week 5) Living Things* – use whole group or as a station.  Science: Explore the five garden types in stations (split into 2 today and 3 tomorrow).  Writing: *Create a Plant* informational writing sheet (in Science folder on DropBox). Use whole group or as a station.  Day Three:  Reading: TW read *The Carrot Seed.* SW describe the character (boy) and setting. will compare characters.  Science: Explore remainder of five garden types in stations.  Writing: *Create a Plant* informational writing sheet (in Science folder on DropBox). Use whole group or as a station.  Day Four:  Reading: TW review *The Carrot Seed.* SW will compare characters.  Science: SW select a garden type. TW model use of Garden Planning and Budget sheet to plan garden.  Writing: *Create a Plant* informational writing sheet (in Science folder on DropBox). Use whole group or as a station.  Day Five:  Reading: TW review *The Carrot Seed.* SW will discuss author’s purpose.  Science: TW quickly review use of planning and budget sheets. Model using iPad and HomeDepot.com to find additional items for garden. SW shop and create garden budget.  Writing: *Create a Plant* informational writing sheet (in Science folder on DropBox). Use whole group or as a station.  Week Three:  Day One:  Reading: TW read first half of *Tops and Bottoms.* SW describe setting.  Science: SW complete garden budget.  Day Two:  Reading: TW read remainder of *Tops and Bottoms.* SW compare Bear and Hare.  Science: TW model using budget to plan garden (using grid sheet). SW use grid sheet to plan their own garden.  Writing: SW work on informational/persuasive writing to accompany final poster presentation (which will be delivered verbally to fifth grade class).  Day Three:  Reading: What lesson did Bear learn in *Tops and Bottoms*.  Science: TW model using grid sheet to make final presentation poster. SW use their grid sheet to make final presentation poster.  Writing: SW work on informational/persuasive writing to accompany final poster presentation (which will be delivered verbally to fifth grade class).  Day Four:  Reading: TW read *The Giving Tree*. SW compare and contrast the boy and the tree.  Science: SW complete garden presentation poster.  Writing: SW work on informational/persuasive writing to accompany final poster presentation (which will be delivered verbally to fifth grade class).  Day Five:  Reading: Author’s Purpose in *The Giving Tree*. Why did the author write this?  Science: SW present final garden posters to fifth grade class.  Writing: SW work on informational/persuasive writing to accompany final poster presentation (which will be delivered verbally to fifth grade class).  Da | |
| Assessment:  *Final Presentation with rubric* | |
| Career Connection: *Who can be invited from the community to talk to your students? Skype, in-person, field trip* | |