University of South Carolina Aiken
471 University Parkway
Aiken, South Carolina 29801
803-641-3313
http://rpsec.usca.edu/CE-MIST/

Unit Plan Overview for Traveling Interdisciplinary Literacy Trunk (TILT)

Title of Unit: Planting Seeds of Knowledge Grade Level: 1st Duration: 3 weeks

Developed by: Melissa Tindall, Ivy Peteet, Mallory Walp, Tyquashia Ingram

Alignment with South Carolina Academic Standards for two or more content areas:

Science	**Social Studies**	**ELA**	**Mathematics**
Plants: 1.L5.A.1 1.L5.A.2 1.L5.B.1 1.L5B.2 1.L5B.3 Inquiry: 1.S.1A.1/.2/.3/.4/.5	Natural Resources: 1-1.3 1-1.4 Maps: 1-1.1 Goods and Services: 1-4.3	Reading Informational Text: RI.5.1 RI5.2 RI8.2 Reading Literature Text: RL8.1 RL5.1 RL.7.1 Writing: W.2.1 W.2.2	Geometry: 1.G.2 Data Analysis: 1.MDA.4 1.MDA.5 Measurement: 1.MDA.2 Number Sense: 1.NSBT.1 Patterns: 1.ATO.9

Connections to one or more Exploratories:

Art	**Music**	**Technology**	**Theatre**
Anchor Standard 2: Students will use different materials, techniques, and processes to make art.	Anchor Standard 4: Students will perform with technical accuracy and expression.	Anchor Standard 1: Students can use technology tools, procedures, and processes to create a variety of media artworks in a safe and responsible manner.	Anchor Standard 1: Students will create scenes using story elements and structure.

Summary of activities showing connections between content areas	Science: *Create flipbook on parts of the plant and the jobs they job. *Create an illustration on what plants need to survive. *Investigate what is inside a seed by dissecting a seed and recording observations. *Participate in a nature walk to find plant structures. Students will record findings in Science journals. *Create anchor charts to represent the different structures, plant needs, and types of plants. *Participate in a Stem investigation with colored water. Students will observe a plant change based on the color added to the water. *Complete the life-cycle unit booklet. *Create a lima-bean plant in a plastic bag taped to the window seal. Daily journal entries to record observations of the growth. *Create a visual life-cycle illustration through the paper plate activity. *Create anchor chart of plant adaptations and different environments (desert, forest, grassland) *Create a flipbook on the different characteristics of the environments. *Learn about plant adaptations through PowerPoint-'Who would win?'

	*Complete plant adaption sort. Social Studies: *Generate a list of different types of plants and the structures that are used for natural resources. (Food/Clothes/Materials) *Analyze and discuss how plant structures are used as goods and services in our community. *Show students different models of food/plants from the different environments around the world. *Show students maps of where different environments are in the world and discuss the map characteristics. *Lesson on different foods that are produced around the world based on the plants' environment *Students will listen to a variety of texts read aloud on different cultures around the world and their use of natural resources. Math: *Students will use two-dimensional shapes to create the parts of a plant. Students will use data of the types of shapes they used to create their plant and record in a tally chart. Students will use data to create various types of graphs. Students will analyze their data. Students will create an informational writing about the shapes they used to create their composite shape. *Create a 'life-cycle' of how a number can be written in multiple ways (number sense/place value) *Students will use non-standard units of measurement to measure the growth of their lima-bean plant throughout the unit. *Create patterns using different colored seeds. 'Plant a Pattern" *Students will use non-standard units of measurement to measure the growth of their lima-bean plant throughout the unit. *Students will graph the growth of their plant in various graphs and analyze the data. ELA: *Quick write: What do you know about plants? *Students will be placed into literature groups. Students will be given a plant to research. Students will create an informational writing on what the plant structures are and what jobs do they do. *Students will listen to a variety of non-fiction and fiction text. Students will retell texts read whole group about plant structures through graphic organizers. *Students will ask and answer questions about text read whole group about plants through graphic organizers. *Small group: students will complete a research paper on their plant. Students will include information about the plant structure, plant life-cycle, plant environment, and plant adaptations. *Students will find text and graphic features through non-fiction books about plants and record in a file-folder *Students will compare and contrast different structures of variety of plants through a Venn diagram. *Quick write: How do plants grow? *Students will listen to a variety of non-fiction texts on different types of plants. Students will create Venn diagram comparing and contrasting the life-cycle of the different plants *Quick write: In what ways do we use plants? *Students will create a tri-Venn diagram to compare and contrast the different environments (desert, grassland, forest)

Text Set (This might include children's literature, films, maps, brochures, magazines, websites, and other resources)	See attached	
Essential Questions	Science: 1.L.5A.1: How do the structures of a plant help the plant survive, grow, and produce more plants? 1.L.5A.2: How can you describe the life-cycle of a plant? 1.L.5B.1: How does the Sun's light help plants? 1.L.5B.2: How do environments support different types of plants? 1.L.5B.3: How can we collect, analyze and interpret data from observations to describe how changes in the environment cause plants to respond in different ways? Math: 1.MDA.4 How can data be collected, organized, represented, and interpreted? 1.MDA.1 How can I measure the length of an object? 1.G.2 How can you combine two-dimensional shapes to compose a new shape? 1.ATO.9 How can I use a pattern unit to create and extend repeating and growing patterns? 1.NSBT.1c How can we use expanded form to read, write, and represent numbers to 100? Social Studies: 1-4.3 Why is it important to obtain goods and services to meet needs and wants? 1-1.3What are natural resources? 1-1.4 How are natural resources used around the world? ELA: RI.5.1/RL5.1 How can asking and answering questions help me understand the text? RI.8.2 How does understanding the text structure help me better understand what I read? W.2.2 How can gathering information from various sources help my writing be stronger?	
Content Area Vocabulary	measure organize data graph tally chart observation/observe communicate stem root	adaptations reproduce minerals nutrients space air water sunlight roots characteristics

	leaf flower fruit seed seed coat nutrients attract survive produce structure flowering plant protective protect development stages life-cycle seed flowering plant germinate germination process sprout pollen growth seedling mature plant baby plant insects survive energy	distinct environments desert forest grassland decay waxy needle-like bark cacti moisture deciduous conserve thrive surroundings living wilt autumn winter shed soil plants animals survival
Pre-Writing and Writing Activities	-Daily observations of the change of growth of their lima-bean plant -Pre-writing: Thinking maps on the research of their plant, graphic organizers used during reading lessons -During writing: Quick writes- What do you know about plants? How do plants grow? In what ways do we use plants? Informational writing on shapes used to create their 2-dimensional plant structure. -Writing Assessment: Students will complete an informational writing on research done throughout the unit on their plant using the pre-writing graphic organizers to help craft their writing.	
Instructional Strategies	- Small group research on specific type of plant -Videos on plant structures, plant life-cycles, and plant adaptations - Demonstrate the stages of the life cycle through models - Hands – on activities to explore plant structures, plant life-cycles, plant environments	

	- Students will create movements to represent the different stages of development - Students will create tableaus to represent plant structures - Responding and reflecting to information learned about plants - Observing and recording the growth of a lime-bean plant over time - Read-alouds (fiction and nonfiction) - Asking and answering questions throughout the unit -Think, pair, share -Anchor charts created throughout unit -Venn diagrams, graphic organizers -Two-dimensional shapes to create the structures of a plant -Visual art creations -Text and graphic features book creation
Accommodations, Modalities of Learning, and Differentiating Instruction	Leveled books on different plants in their research group. Different representation strategies of the life cycle of plants. Creating research groups up based on academic levels and personalities. Activities that reach visual, kinesthetic, and auditory learners. Multiple opportunities for students to express their visual and artistic capabilities.
Assessment	Informal Assessments: -Quick Writes -Class generated flipbooks -Think, pair, share Formal Assessments: -Research paper -Text and Graphic Feature booklet -Plant Adaptation sort Worksheet -Plant Life-cycle Worksheet

Attached:

1. Implementation Guide
2. Daily Lesson Plans in Learning Cycle, 5E, or 7E format