

3rd Gr. PBL Semester Plan

Grade: 3rd	Teacher: Barrere ,Clark, Gough, Leon, Smith	Dates: 8/23-12/23
General Problem/Phenomenon: Ongoing Question: What soil or soil mixture will best grow my plant?		

	Science	Social Studies	Math	Reading	Writing
Standards	Obtain, evaluate, and communicate information about physical attributes of rocks and soils. b). <i>plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).</i>	SS3H3 Explain the factors that shaped British Colonial America. SS3G1 Locate major topographical features on a physical map.	3.MDR.5.1 Ask questions and answer based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life. 3.MDR.5.3 Use rulers to measure lengths in halves and fourths of inch and a whole inch.		

Technology	Resources/Supplies Needed	STE(a)M Integration	Community Partnerships
Epic Flipgrid Ozobots	Ozobots Containers Seeds Red clay, sand, loam (potting soil) Gardening tools STEM journals		UGA Ext. Office- Katie Martin

PBL Lesson Plans (these plans will occur during the day of the week that no specials are scheduled)

DT Stage	DTP Plan	
Empathize	Timeframe: 1 week Probing Questions: What soil or soil mixture should I have for my seed to grow into a plant and thrive. Progression of Tasks:	Standards during this Stage (insert language of standard): SE31. Obtain, evaluate, and communicate information about physical attributes of rocks and soils. <i>b). plan and carry out investigations to</i>

	- Ask and Plan: research types of soil and decide on soil to grow seed - Complete: What is Soil? Graphic Organizer: Define & discuss air, water, minerals, and humus - The students will read articles about what makes up soil. (use Soil PowerPoint to gather information for the chart) - Imagine: Record in STEM journal the soil or soil mixture will use to grow seed Resources: soil power point, graphic organizer	describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).
(re)Define	Timeframe: 1 week Probing Questions: Progression of Tasks: - Plan: Students will write steps in the process of preparing soil and planting seed with resources provided. - The students will have another group read plan to help revise. (peer feedback) Resources:STEM journals	Standards during this Stage (insert language of standard): SE31. Obtain, evaluate, and communicate information about physical attributes of rocks and soils. b). plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).
Ideate	Timeframe: Probing Questions: Progression of Tasks: - Create : The students will prepare soil and decide on environment to place planted seed. Resources: containers (TRC), soil (parent donations), sand, red clay (UGA), water, seeds, STEM journals	Standards during this Stage (insert language of standard): SE31. Obtain, evaluate, and communicate information about physical attributes of rocks and soils. b). plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).
Prototype	Timeframe:3-4 months Probing Questions: Progression of Tasks: - Students will observe and record growth of seed/plant Resources: graph in STEM journal	Standards during this Stage (insert language of standard): SE31. Obtain, evaluate, and communicate information about physical attributes of rocks and soils. b). plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).
Test & Improve	Timeframe: Probing Questions: How did my seed grow and did the soil provide a good environment for my seed to grow and thrive? Progression of Tasks: Observe data and reflect on observations.	Standards during this Stage (insert language of standard): SE31. Obtain, evaluate, and communicate information about physical attributes of rocks and soils. b). plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).

	• Students will decide on how to create a better environment for plant Resources:	
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