2022-2023 Art Engineering Curriculum

Science Unit	***Nature of Science***
Engineering Unit	**Nature of Science & Engineering (NSE)**
Timeline	**August – September (Grading Per. 1)**
	Engineering
Kindergarten	Water Paint Project. Observing water absorption, change of paper Vocab: Observe, Describe, Compare. ROYG.BIV introduction.
First Grade	Rainbow Whale Project – Investigate the rainbow order and the largest creature in the sea.
Second Grade	Steamy Mug Project - Explain, Explore, describe differences of 2D and 3D, predict if hot air rises.
Third Grade	Green Water Paint Project. Observing color creations, water absorption, change of paper, color Vocab: Observe, Investigate, Explain, Explore, describe, Predict, Change, Compare
Fourth Grade	3D Soup Can Project- Warhol Compare 2D to 3D based on physical properties of mass, shape, volume, color, hardness, texture.
Fifth Grade	Tag Art – Observe, sketch, investigate and observe examples. Discuss real world connections and graphic design.

Science Unit	***Physical Science***
Engineering Unit	**Gravitational Force & Resultant Motion/ Electromagnetic Force & Resultant Motion**
Timeline	**(Grading Per. 2) Oct.-Dec. OCT= Gravitational Force and Resultant Motion NOV=Electromagnetic Force Resultant Motion**
	Engineering
Kindergarten	Integrate discussions on: Color Spectrum activity color spectrum- Students will investigate that lines LOOK different: Zig Zag, horizontal, vertical, diagonal
First Grade	Discussions on: What types of water are found on earth? Water lines: river, lake, ocean. How things move: push, pull, zig zag, direction (vertical, horizontal, diagonal),
Second Grade	Discussions on: Clay project Gravity, minerals, clay ingredients/particles, physical change vs. chemical change
Third Grade	Discussions on: Properties of light. Light waves: reflect, absorb, (painting)
Fourth Grade	Drawing perspective of connects car (two days?) Researching ipad technical app.
Fifth Grade	Discussions on: How water and air can move things- respond to all the past projects created in art How heat changes clay (kiln and temperature)

Science Unit	***Earth Science***
Engineering Unit	**Natural Resource & Space Exploration**
Timeline	**(Grading Per. 3) January= Natural Resources** **February-March= Space Exploration**
	Engineering
Kindergarten	Sun & Moon Discussions: Sun: Size and circles Moon: The students will observe that the moon changes shapes. Moon phases activity Vocab: Sun, Moon, Star, Earth, Rotation, Phases, Cycle, Shape, Size
First Grade	Northern Lights Project Atmosphere, color, time of year **Recognize that some things in the world around us happen fast and some happen slowly.**
Second Grade	Artic animal Project Stars: How to draw stars activity Observe and discuss stars Artic, Desert, Rainforest, Ocean,
Third Grade	Stars: How to draw stars activity
Fourth Grade	Moon Phase discussions Moon: Phases
Fifth Grade	Paint night sky project: Galaxies & Milky Way Solar System & Sun, planets, moons, asteroids, comets

2022-2023 Art Engineering Curriculum

Science Unit	***Life Science***
Engineering Unit	**Life Process/ Ecosystems**
Timeline	**(Grading Per. 4) April=Life Processes May=Ecosystems**
	Engineering
Kindergarten	Animals' habitat discussions Vocab: Environment, Habitat, Senses, Similar
First Grade	Butterfly Project- symmetry What observations can I make using my senses? Metamorphosis, habitat, Living, non-living , environment, stem, roots, leaves, flowers, needs, senses,
Second Grade	Tiger drawing project Animal, plant, habitat
Third Grade	Polar Bear Project Animal, plant, habitat
Fourth Grade	Recycling Discussions Ecology- Reduce/ Renew/ Recycle
Fifth Grade	Full body drawing Human body

Music- Math Topics

Grade Level	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade
Math Topic(s)	Clay Donut Project Paper Sculpture Project Clay Project: Weight before and after firing	Mondrian Squares Clay Project: Form 3D vs. 2D Weight before and after firing	Weaving -odd even Clay Project: Form, Weight before and after firing	Clay Project: Form, Weight before and after firing	Form Patterns: Clay Owl Weight before and after firing Car technical drawing (to scale) Composition & Division: Jen Stark Project	1 Point Perspective Drawing Fold/divide: Dragon Eye Project C lay Form: Clay coil pots, Form, Weight before and after firing