

Major Unit: The Art of Science

Lindsey Gathright

2019-2020

Overall Concept of the Course:

Students will use the six basic scientific process skills as we experiment with various ways to create art. Students will be immersed in a very hands-on unit with experimentation, investigation, and original thinking. We will explore different parts of science including Chemistry and Physics, while at the same time, developing an understanding and appreciation for art.

Unit Rationale:

This Major Unit is a creative exploratory unit combining science with art. We will put our science process skills to good use in this unit, using our skills of observing, measuring, classifying, communicating, inferring, and predicting. We will also explore various types of art and how they are created. Students will be challenged to use creative problem solving, while building affective skills such as perseverance and self-efficacy.

WINGS Major Unit Goals and Objectives:

By the end of this unit students will be able to:

- Understand how art and science are connected.
- Use creative problem-solving and perseverance while creating art.
- Improve or change their art using their scientific process skills.
- Explain how Chemistry and Physics play into different types of art.

Applied Thinking Skills

- Creative Thinking
- Critical Thinking
- Problem Solving
- Time Management

Applied Affective Skills

- Communication
- Conflict Management
- Curiosity
- Integrity
- Perseverance
- Self-Awareness
- Self-Regulation
- Social Awareness
- Sustained Attention

Resources:

- Georgia's Terrific, Colorific Experiment by Zoe Persico
- Mix It Up! by Herve Tullet
- Snowflakes *Featuring the Amazing Micro-Photography of Kenneth Lebbrecht, 2008*
- Science Arts: Discovering Science Through Art Experiences
- Art Lab for Kids by Susan Schwake and Rainer Schwake
- I Fall Down by Vicki Cobb and Julia Gorton
- Art Is... by Bob Raczka
- www.kidsdiscover.com
- www.giftofcuriosity.com
- www.discoverycube.org
- www.usgs.gov
- www.scienceleadership.org