OK GO SANDBOX

SPIN ART

ABOUT THIS CHALLENGE

In this challenge, students will learn about control in art. While many paintings and photographs are done by hand to give the artists most of the power in what the final artwork will look like, spin art is an art form in which the artist has only partial control over how the final art piece will turn out. Students will discuss control and design three art projects with varying components in order to discover the impact of certain decisions while making art.

CONTENT AREA

Grade: 3-5, 6-8, 9-12

Content Area: Physics, Art

Context for learning: Before starting this challenge, students must be somewhat familiar with basic art terminology and general knowledge of circular motion.

TOPICS

Artistic Control

Design Process

Viscosity and Paint properties

STANDARDS

VA:Cr1.1.4a Brainstorm multiple approaches to a creative art or design problem.

VA:Cr2.1.5a Experiment and develop skills in multiple art-making techniques and approaches through practice.

VA:Cr1.2.7a Develop criteria to guide making a work of art or design to meet an identified goal.

Note: This lesson plan may align with other sets of standards not included here.

LEARNING OBJECTIVES

Students will be able to:

Change aspects of the design process to create a different end product

Control certain variables of the art

Learn what cannot be controlled in the process of spin art

Understand more about the "speed" of fluids with regard to paint

GETTING STARTED

Show the "This" music visualizer. Get students excited about the STEAM concepts in this video.

Following this, watch the "Art of Circular Motion" video, and prompt the students to focus on the spin art portions of the video.

MATERIALS

Plastic tubs
Water
Lazy Susan
Canvases or paper
Paint (acrylic or washable preferred)
Gloves
Ponchos or paint clothes
Plastic sheeting
Tape
Stir sticks

PART ONE: BRAINSTORMING

Talk about the general challenge and vocabulary concept of artistic control with the students.

Have students brainstorm what they can and cannot control about art in general.

Direct this conversation towards spin art. Have the students fill out their worksheet with brainstorming ideas.

Discuss the students' ideas and be sure to bring up the following:

Topics of control: paint color, amount of paint, viscosity of paint (can be diluted with water), the relative speed of spinning, the direction of spinning, the location of paint when dropped, paint surface (tape, no tape).

Topics of little control: the location of paint at the end, paint splatter, the effect of the spinning, the exact speed of the spinning, the consistency of the spinning, the magnitude of the force acting on paint (if this science concept is familiar to the students).

Talk about the vocabulary concept of viscosity, and expand further on topics the students may need more explanation on.

PART TWO: SPIN ART

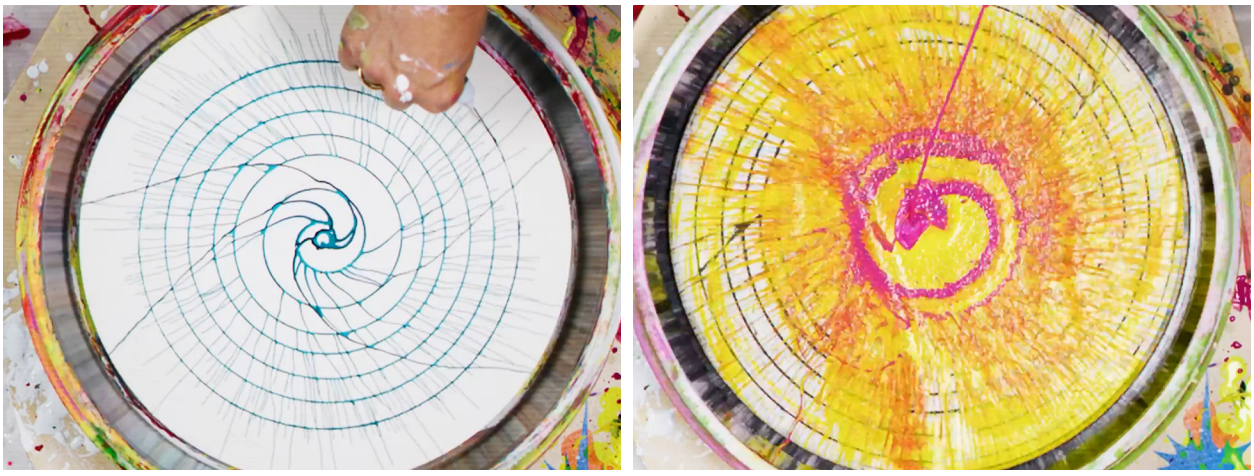
Split the students up into groups of three.

Have each group design three different processes for three different spin art pieces. Guide them through the worksheet to create an original design, and change 1 - 2 things that can be controlled for the subsequent 2 designs.

Prompt the students into predictions. How do they think their designs will be different? Have them sketch what they think their spin art pieces might look like.

Help each group create their proposed art pieces.

Have the students sketch replicas of their final products in their worksheet, and talk them through the post-challenge guiding questions (see below in the guiding questions section).



EXAMPLE SPIN ART FROM "THIS" MUSIC VISUALIZER

VOCABULARY

Artistic Control: The amount of power an artist has to control what the outcome of the final product looks like. This is a concept more common in music and film production.

Viscosity: The resistance a fluid has to flow. For example, water will have a lower viscosity than honey. If we add water to paint, it will flow faster and have a lower viscosity.

GUIDING QUESTIONS

What art did you see in the "This" music visualizer?

What methods did the band use to create that art?

What did the band do differently in the second round of spin art?

How did your design process changes impact your spin art pieces?

Did your final results look similar to what you predicted they would?

What could account for the similarities or differences in your predictions compared to your results?

What would you do differently if you were to do a fourth or fifth piece?