Motion, Marbles and Ink

By Jaime West

Jwest040@dadeschools.net

South Dade Senior High

7701

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Email: audrey@educationfund.org
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Goals and Objectives:

Student Goals:

• **Explore Unique Mark Making and Process-Based Art:** Students are introduced to the technique of using marbles, ink, and paint to create unique lines, patterns, and textures on paper.

• **Experiment with Movement and Chance:** Students roll paint-covered marbles across paper in different directions, observing how movement, speed, and force affect the marks they create.

• **Learn About Color Mixing and Layering:** Students explore how different colors interact, overlap, and blend as marbles move through the paint.

• **Develop Fine Motor Skills and Hand-Eye Coordination:** Students practice controlling containers, marbles, paint, and paper while strengthening coordination and precision.

• **Create Abstract Artwork Through Lines and Patterns:** Students use the marks made by rolling marbles to create expressive, abstract compositions rather than focusing on realistic images.

• **Make Artistic Choices:** Students choose colors, paper placement, marble size, and movement techniques to personalize their artwork.

• **Explore Texture, Repetition, and Direction:** Students investigate how repeated marble paths, varied pressure, and changes in direction can create visual rhythm and interesting textures.

• **Practice Observation and Reflection:** Students examine their finished artwork and discuss how the movement of the marbles, colors, and patterns contributed to the final design.

• **Connect Art to Emotions and Imagination:** Students may describe the feelings, memories, objects, or imagined scenes suggested by the lines and colors in their artwork.

• **Build Confidence Through Open-Ended Creativity:** Students learn that there is no single correct result and that unexpected marks can become meaningful parts of an artwork.

Teacher Goals:

• **Learn How to Guide Marble Painting Techniques:** Develop strategies for demonstrating how to safely dip marbles in ink or paint and roll them across paper to create artwork.

• **Teach Color, Line, and Pattern Concepts:** Help students understand how color choices, overlapping lines, repetition, and direction affect the appearance of a composition.

• **Encourage Creative Exploration:** Provide students with opportunities to experiment with different materials, movements, and methods without emphasizing perfect results.

• **Support Fine Motor and Sensory Development:** Use the activity to strengthen coordination, controlled movement, spatial awareness, and sensory exploration.

• **Promote Problem-Solving and Artistic Decision-Making:** Encourage students to make choices about color combinations, marble movement, paper placement, and how to develop their artwork.

• **Adapt the Project for Diverse Classrooms:** Explore ways to modify the activity for different ages, abilities, motor skills, and sensory needs by adjusting materials, container sizes, tools, and levels of teacher support.

• **Create a Safe and Organized Art Environment:** Learn classroom-management strategies for handling paint, ink, marbles, trays, and drying artwork while maintaining a clean and safe workspace.

• **Encourage Reflection and Discussion:** Use age-appropriate questions to help students describe their process, explain their artistic choices, and respond respectfully to the artwork of others.

• **Connect Artmaking to Learning Standards:** Integrate the project with lessons involving color theory, motion, cause and effect, observation, sensory learning, and creative expression.

• **Value Process Over Product:** Help students recognize that experimentation, unexpected results, and personal expression are important parts of the artistic process.

• **Expand Beyond:** Help students recognize that this technique can be a multi process project where students can make and incorporate it into backgrounds and other projects

Florida Standards: Painting with Marbles

K–5

VA.K.S.1.1: Explore art processes and media to produce artworks. Students experiment with paint, ink, marbles, movement, and gravity as alternative methods of mark-making.

VA.K.S.1.2: Produce artwork influenced by personal decisions and ideas. Students make individual choices regarding colors, marble placement, movement, and composition.

VA.1.S.1.1: Experiment with art processes and media to express ideas. Students investigate how rolling marbles through wet media produces different lines, patterns, textures, and visual effects.

VA.1.F.1.1: Use various art media and real or imaginary choices to create artwork. Students creatively experiment with unconventional painting tools and processes.

VA.1.O.1.1: Identify and use the structural elements of art and organizational principles of design to support artistic development. Students explore line, color, movement, pattern, repetition, and visual balance through marble-generated marks.

VA.1.C.2.1: Describe visual imagery used to complete artwork. Students reflect on the lines, shapes, patterns, and unexpected imagery created through the marble-painting process.

VA.4.S.1.1: Manipulate tools and materials to achieve diverse effects in personal works of art. Students manipulate marbles, containers, paint, ink, and surface angles to investigate how physical movement changes visual results.

6–8

VA.68.S.1.1: Manipulate content, media, techniques, and processes to achieve communication with artistic intent. Students experiment with marble size, speed, direction, color, layering, and media to intentionally influence their abstract compositions.

VA.68.S.3.2: Develop spontaneity and visual unity in artwork through repeated practice and refined craftsmanship. Marble painting directly encourages students to balance spontaneous, chance-based marks with intentional artistic decisions to create a unified composition.

VA.68.C.1.1: Apply a range of interests and contextual connections to influence the artmaking and self-reflection processes. Students evaluate how experimentation, chance, movement, and personal choices influence their finished work.

9–12

VA.912.C.1.1: Integrate curiosity, range of interests, attentiveness, complexity, and artistic intention in the art-making process to demonstrate self-expression. Students use experimentation and controlled chance to develop personally expressive abstract compositions.

VA.912.S.1.1: Use innovative means and perceptual understanding to communicate through varied content, media, and art techniques. Students explore marbles as unconventional painting tools and investigate how motion can become part of the creative process.

VA.912.S.2.5: Demonstrate use of perceptual, observational, and compositional skills to produce representational, figurative, or abstract imagery. Students make compositional decisions involving color, line, layering, movement, negative space, repetition, and balance while developing abstract marble paintings.

VA.912.S.3.12: Develop competence and dexterity, through practice, in the use of processes, tools, and techniques for various media. Students refine their control of marble movement, surface angle, paint/ink consistency, layering, and application techniques through repeated experimentation.

Overview

Motion, Marbles & Ink is an abstract, process-based art project that uses moving marbles and ink to create unique, unpredictable patterns through motion, force, and gravity. Students manipulate marbles across paper or other surfaces to explore how movement can become an artistic tool. The project combines experimentation and chance with intentional artistic decision-making, allowing students to investigate line, movement, texture, color, repetition, layering, and composition.

Motion, Marbles & Ink offers a hands-on, inquiry-based art experience that blends creativity with foundational STEAM concepts such as motion, force, gravity, friction, viscosity, and cause-and-effect relationships. Its most innovative feature is the use of simple, low-cost materials to produce highly complex and visually striking results. This makes the project accessible to a wide range of students while remaining intellectually and artistically engaging.

Students investigate how changing variables—including the number and size of marbles, tray angle, type and viscosity of ink, amount of force, and direction of movement—affects the resulting marks. Through observation, prediction, experimentation, and reflection, students develop problem-solving and critical-thinking skills while discovering connections between visual art and science.

The process also encourages students to embrace experimentation and unexpected outcomes. Rather

than focusing solely on creating a predetermined image, students learn to respond to what happens during the artistic process. This supports creative confidence, curiosity, risk-taking, self-expression, and aesthetic decision-making.

Teachers can easily adapt Motion, Marbles & Ink across grade levels, ability levels, and subject areas. The activity can function as an introduction to abstract art and experimental mark-making, a STEAM investigation of physical forces, or a starting point for more complex mixed-media artwork. No prior artistic experience is required, making the activity approachable for a wide variety of learners.

This workshop provides educators with ready-to-use strategies for establishing a safe and low-cost marble painting station, managing materials and cleanup, guiding inquiry-based experimentation, incorporating cross-curricular STEAM connections, and assessing student learning through process-based evaluation.

Materials

Required Materials

- Watercolor paper or mixed-media paper
- Black Sumi ink
- Shallow, walled trays or boxes
- Marbles
- Pencils

Optional Materials

- Colored inks
- Liquid watercolors
- Watercolor paints
- Cornstarch
- Markers
- Colored pencils
- Different sizes and types of marbles
- Sketchbook or process journal

How to Implement

Introduce **Motion, Marbles & Ink** by discussing how artists can create marks without traditional brushes or drawing tools. Ask students to consider how movement itself could become part of the art-making process.

Demonstrate how to prepare a painting tray by placing watercolor or mixed-media paper inside a shallow tray or box. Show students how to coat or introduce marbles to Sumi ink, colored ink, or liquid watercolor and place them onto the paper.

Students tilt, rotate, and gently move the tray, allowing gravity and force to move the marbles across the surface. Encourage students to observe the lines and patterns created by different movements.

Once students understand the basic process, introduce experimentation with variables such as tray angle, marble size, number of marbles, direction of movement, ink viscosity, and amount of force. Students can predict what they believe will happen before testing each variable and compare their predictions with the actual results.

Encourage students to create several experimental or “trial” artworks before completing a final piece. Students should reflect on which techniques produced the most interesting lines, textures, patterns, movement, and compositions and then intentionally incorporate those discoveries into their final artwork.

Artist Connections

- Jackson Pollock
- Helen Frankenthaler
- Sam Francis
- Gerhard Richter
- Morris Louis
- Joan Mitchell
- Cy Twombly
- Kazuo Shiraga

These artists can be used to introduce students to abstraction, action painting, gestural mark-making, experimental processes, chance, movement, and unconventional approaches to applying media.

Extension Ideas

- Experiment with different sizes, weights, and numbers of marbles to compare their marks.
- Alter the viscosity of ink or watercolor and investigate how thicker and thinner media affect marble movement.
- Add cornstarch to selected media and compare its movement with untreated ink.
- Use the activity as a STEAM investigation of gravity, force, friction, motion, velocity, and cause-and-effect relationships.
- Create several marble paintings and cut, layer, weave, or collage them into a larger composition.
- Draw into completed marble paintings with markers, colored pencils, watercolor, or ink.
- Identify recognizable forms within the abstract marks and develop them into representational imagery.
- Compare controlled movement with chance by creating one highly directed artwork and one in which students intentionally relinquish control.
- Create collaborative large-scale marble paintings.
- Have students photograph different stages of the process and create a visual process journal.
- Compare marble painting with other forms of action painting and experimental mark-making.
- Use different surface materials to investigate how texture and absorbency affect the movement of ink.

Lesson Plan

Vocabulary

- Abstract art
- Process art
- Action painting
- Experimental art
- Mark-making
- Line
- Movement
- Pattern
- Texture
- Composition
- Repetition
- Layering
- Chance
- Gravity
- Force
- Motion
- Friction
- Viscosity
- Variable
- Cause and effect

Procedures

Introduction

- Introduce **Motion, Marbles & Ink** as a process-based abstract art activity in which movement becomes an art-making tool.
- Discuss how artists do not always need traditional brushes, pencils, or drawing tools to create marks.
- Introduce examples of artists who explored movement, gesture, chance, abstraction, and unconventional methods of applying media.
- Discuss how line, movement, repetition, color, texture, and layering can create visual interest within an abstract composition.
- Introduce the STEAM connections within the project, particularly gravity, force, friction, motion, viscosity, variables, and cause and effect.
- Ask students to predict what might happen when a marble covered in ink moves across a sheet of paper.
- Demonstrate safe procedures for handling Sumi ink, liquid watercolor, marbles, and trays.

Demonstration

- Place watercolor or mixed-media paper inside a shallow, walled tray or box.
- Select Sumi ink, colored ink, liquid watercolor, or another appropriate fluid medium.
- Introduce one or more ink-coated marbles into the tray.
- Tilt the tray slowly in different directions and observe the paths created by the marbles.
- Demonstrate how changing the tray angle affects the direction and speed of the marble.

- Experiment with gentle and more pronounced movements to demonstrate how force affects the resulting marks.
- Demonstrate the difference between using one marble and several marbles simultaneously.
- Compare different marble sizes when available.
- Demonstrate how changing ink viscosity affects movement and mark-making.
- Discuss how each variable changes both the physical movement of the marble and the visual qualities of the artwork.

Experimental Trials

- Students design their painting setup by selecting their surface, ink colors, and initial number of marbles.
- Before beginning, students make a prediction about how the selected variables will affect their artwork.
- Students place ink-coated marbles into their trays and manipulate the trays through tilting, rotating, and gentle shaking.
- Students observe how gravity, force, direction, and speed influence the resulting marks.
- Students create multiple trial artworks while intentionally changing one or more variables.
- Encourage students to compare the results of different trials.
- Students document materials, variables, movements, observations, and outcomes in a sketchbook or process journal.

Studio Time

- Students review their experimental trials and identify which processes created the most successful or visually interesting results.
- Discuss how “successful” does not necessarily mean controlled or predictable. Unexpected results can become important artistic discoveries.
- Students select techniques they want to intentionally incorporate into a final composition.
- Students create a final marble painting using their knowledge from previous experiments.
- Encourage students to consider line, color, movement, repetition, layering, negative space, contrast, and overall visual unity.
- Students may add additional layers of marble-generated marks after previous layers dry.
- Encourage students to make intentional decisions while remaining open to unexpected outcomes.
- After the marble process is complete, students may optionally develop the artwork further using watercolor, markers, colored pencils, ink, drawing, or mixed-media techniques.

Reflection and Critique

- Students compare their predictions with the actual results of their experiments.
- Ask students to identify which variables had the greatest effect on their artwork.
- Students discuss which movements created the most interesting lines, textures, and patterns.
- Have students explain where they exercised artistic control and where chance influenced the artwork.
- Discuss how scientific observation helped students make stronger artistic decisions.
- Students present their final pieces and explain how movement, gravity, force, and material choices influenced their compositions.
- Encourage students to use appropriate artistic and scientific vocabulary when discussing their process and results.

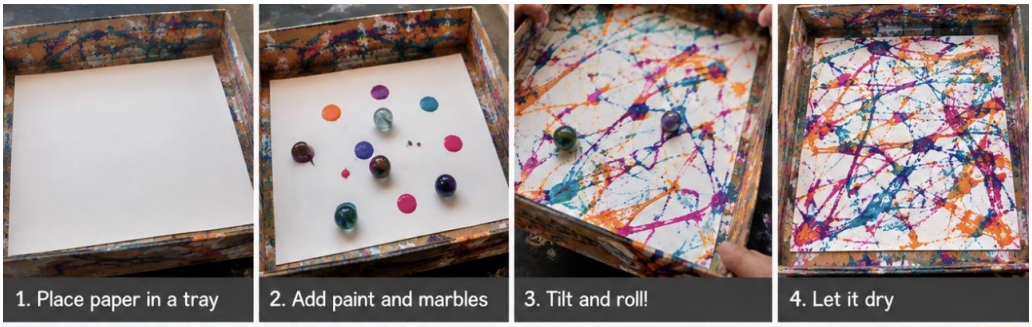
Resources:

- **YouTube Video: *Painting with Marbles! | Process Art Idea for Kids* by The Artful Parent** https://www.youtube.com/watch?v=hT4KXR1TlzM&utm_source=chatgpt.com
- **Activity/Article: *Marble Painting* by Science World** https://www.scienceworld.ca/resource/marble-painting/?utm_source=chatgpt.com
- **Lesson: *Rolling into Art – Feeling the Motion Through Force* by ArtsNOW** https://artsnowlearning.org/project/grade-2-feeling-the-motion-through-force/?utm_source=chatgpt.com
- **Article/Lesson: *Force and Motion Lesson Through Action Art* by The Institute for Arts Integration and STEAM** https://artsintegration.com/2017/07/01/force-motion-lesson-action-art/?utm_source=chatgpt.com
- **Lesson Plan: *A Splatter, a Blob, a Swirl: The Art of Jackson Pollock* by Crayola** https://www.crayola.com/lesson-plans/a-splatter-a-blob-a-swirl-the-art-of-jackson-pollock-lesson-plan?utm_source=chatgpt.com
- **Article/Activity: *Marble Painting for Kids: Gravity Art and Science Project* by NurtureStore** https://nurturestore.co.uk/art-science-lesson-gravity-painting/?utm_source=chatgpt.com

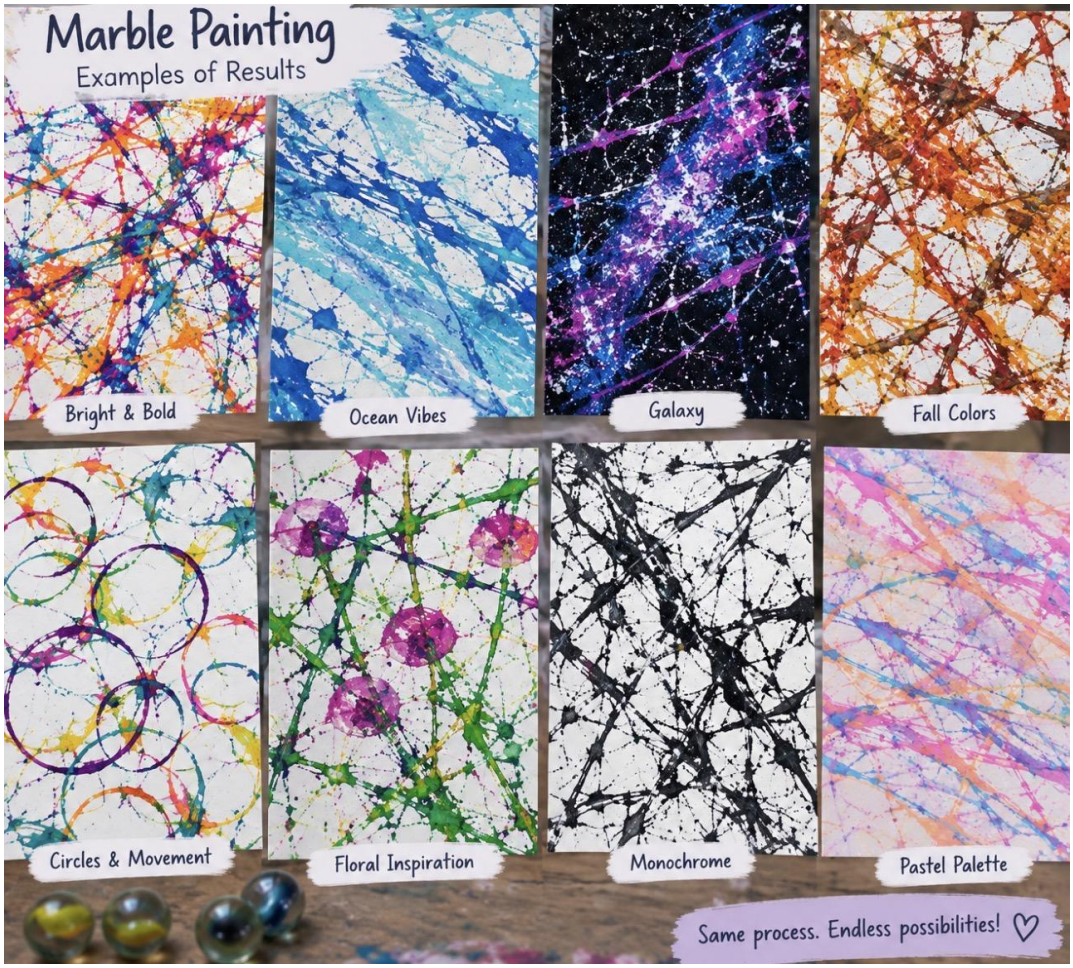
Step-by-Step Process

- **Step 1: Prepare the Painting Tray**
  Students select a surface such as watercolor paper, mixed-media paper, canvas, or another suitable material and place it inside a shallow tray or box. They then choose the ink colors they want to use and consider how those artistic choices may affect the final composition.
- **Step 2: Prepare the Marbles**
  Students coat one or more marbles with ink or place a small amount of ink into the tray. The marbles are then placed onto the prepared surface.

- **Step 3: Create Movement**
  Students tilt, rotate, or gently shake the tray to move the marbles across the surface. As the marbles roll, students observe how gravity and force affect their direction, speed, and the lines or patterns they create.
- **Step 4: Make Predictions**
  Before beginning additional trials, students predict how changing a variable may affect the outcome. Variables can include the number of marbles, marble size, ink thickness, tray angle, or amount of force used.
- **Step 5: Experiment with Variables**
  Students complete several trials by changing one variable at a time. They compare the results and observe how each change affects the movement of the marbles and the appearance of the artwork.
- **Step 6: Create Trial Artworks**
  Students produce multiple experimental artworks using different movements and material combinations. They identify which techniques create the most interesting lines, textures, patterns, or areas of movement.
- **Step 7: Document the Process**
  Students record their materials, variables, movements, predictions, and outcomes in a sketchbook or process journal. They may also sketch, photograph, or describe their experimental results.
- **Step 8: Make STEAM Connections**
  Teachers connect the activity to scientific concepts such as motion, gravity, force, friction, viscosity, and cause-and-effect relationships. Students discuss how these physical forces directly influence the artwork they create.
- **Step 9: Create the Final Artwork**
  Using information gathered from their trials, students select the techniques and variables they found most successful and use them intentionally to create a final marble-and-ink composition.
- **Step 10: Reflect and Present**
  Students present their finished artwork and explain how movement, material choices, and physical forces influenced their design. They reflect on which parts of the process they controlled, and which results occurred through chance or experimentation.


1. Place paper in a tray
2. Add paint and marbles
3. Tilt and roll!
4. Let it dry




Marble Painting
Examples of Results
Bright & Bold
Ocean Vibes
Galaxy
Fall Colors
Circles & Movement
Floral Inspiration
Monochrome
Pastel Palette
Same process. Endless possibilities!