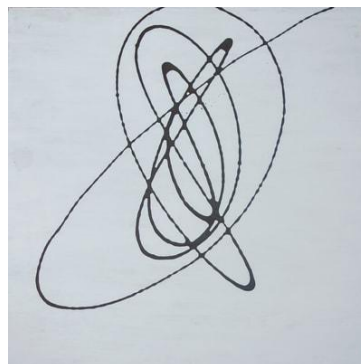


PENDULUMS OF FATE

ESSENTIAL QUESTIONS:

Is our ultimate fate determined by our beginning?
What can observable patterns tell us about the way something began?
What is the role of chaos in our lives?
What determines who we will become?



DESCRIPTION:

“Pendulums of Fate” is a combined Humanities and Physics project where students will study beginnings, ends, and what parts of each can be controlled. In Physics, students will study and create pendulums, and by carefully controlling the start conditions create a pendulum which paints a shape which they design. They will learn to create the conditions by which a work of art will emerge. In Humanities, students will examine how backgrounds and history influence ones future and whether or not that future is fixed. They will study figures of history and society who both followed their path and deviated from it. They will choose a future for themselves and study the conditions needed to bring it about.

KEY DELIVERABLES: (Physics)

One 2x2 pendulum painting and descriptive poster (pairs)
One 4x4 performance pendulum painting and descriptive poster(groups)
Mini doc / How It's Made episode

EXHIBITION:

At exhibition students will present their theories of determinism and fate as well as their predicted models of paintings they will create. In front of a live audience students will launch their final pendulum paintings, discussing their process and enjoying the results.

Content	Skills	Soft Skills
-Classical Physics -Forces and Gravitation -Tension and Compression -Potential Energy and Simple Machines -Torque and Angular Momentum -Oscillation and Simple Harmonic Motion -Relativity and Quantum Physics (maybe)	-Analyzing and Interpreting Data -Tools and Building -Calculations of Potential Energy, Force, Momentum -Planning and Carrying out Investigations -Constructing Explanations -Scientific Modelling	-Collaboration in Groups -Problem Solving -Presenting for an Audience -Responsibility (tools, materials, timelines) -Adobe Suite Skills -Creativity and Artistry

