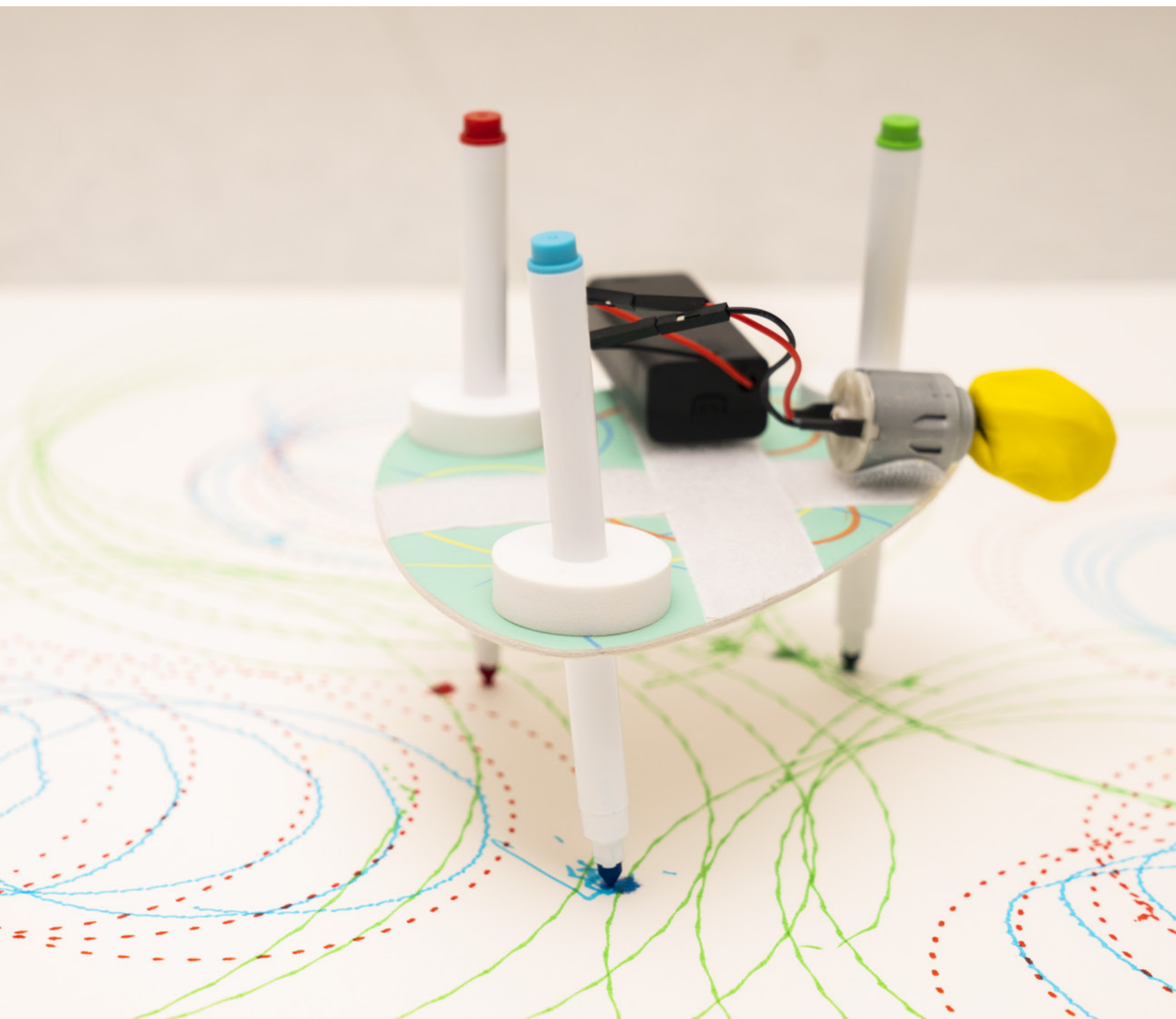




Drawbot

Next Generation Science Standards



How does the Drawbot project align to the Next Generation Science Standards?

NGSS	The Drawbot Project
3-PS2-1: Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	<i>Students will experiment with balanced and unbalanced forces by adjusting their drawbot's design and investigating the results (Section 1 and Section 2).</i>
3-5-ETS1-1: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	<i>Students will adapt their drawbot to produce a specific type of drawing, using only the materials given (Section 2).</i>
3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	<i>Students will investigate multiple solutions in order to design a drawbot that can produce new patterns (Section 2).</i>
3-5-ETS1-3: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	<i>Students will adjust multiple variables in their drawbot, test the design, and make changes based on the results (Section 2).</i>