 MARYVILLE UNIVERSITY

Tantrum Baby
Grade Band Elementary

Physical Science	Next Generation Science Standards
1-PS4-1	Understanding light and sound waves (sensor input could relate)
3-PS2-1	Plan and conduct investigations on effects of balanced/unbalanced forces on motion.
4-PS3-4	Apply scientific ideas to design, test, and refine a device that converts energy to motion.
5-PS2-2	Make observations and measurements to provide evidence of the effects of forces on objects
Engineering Design	
K-2 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.
K-2 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.
K-2 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.

Reading	English Language Arts (Reading & Writing)
RI.1.3 to RI.5.3	Explain cause and effects in informational texts (what causes tantrums).
RL.1.3 to RL.5.3	Describe characters' responses to challenges.
SL.1.1 to SL.5.1	Engage in team discussion and explanations about how the baby moves and why.
Writing	

W.2.2 to W.5.2	Write informative texts to explain how the model works.
W.3.3 to W.5.3	Write a narrative about the baby's reaction to being told no (creative/emotional extension).
W.3.7 to W.5.7	Conduct short research and experiments; gather and record observations.
Measurement and Data	**Mathematics**
1.MD.4 to 5.MD.2	Represent and interpret data (motor settings,tantrum durations, motion repetitions).
4.MD.5	Use angles in motion simulation (flailing arms, head turns)..
5.MD.3-5	Volume/mass of parts if relevant to model's movement.
Operations & Algebraic Thinking	
3.OA.1 to 4.OA.3	Solve word problems related to motion steps, motor power, timing..
5.OA.1	Interpret expressions involving patterns or controls in motor sequences.
Mathematical Practice Standards	**Modeling & Problem Solving**
MP2	Reason quantitatively about garden space and sensor data.
MP4	Model a real-world problem using math.
MP5	Use appropriate tools (e.g., sensors, measurement tools, graphing tools).
Computer Science	**Missouri K-5 Draft Standards**
DA.K-5.1	Collect and represent data in various ways.
AP.K-5.2	Develop programs with sequences and simple loops to solve problems.
AP.K-5.4	Test and make adjustments for accuracy and effect.
AP.K-5.4	Test and refine programs based on feedback or performance.
IC.K-5.1	Understand how computing impacts daily life and the environment.