

A CHILD'S PATH IN SCIENCE

FORCE AND STABILITY: ENGINEERING

4 - 7 months	Attend to a toy while exploring it with the hands. (Scaled score of 9 for 5: 16-6:15 mos.; Bayley 2006: 55) pg.66
8 months	Put objects in a clear container, turn it over and watch the objects fall out, and then fill it up again. (8 mos.; Meisels and others 2003, 21) pg. 65
18 months	Build a tower with the big cardboard blocks and kick it over to make it fall, then build it again and knock it down with a hand. (18 mos; Meisels and others 2003, 37) pg. 65
36 months	Pushes the big green button to make the tape recorder play. (By 36 mos.; American Academy of Pediatrics 2004, 308) pg. 65
48 months	When building with blocks, puts more and more blocks on the top to find out how tall the tower can get without falling apart. Pg. 61 Vol. 3 When playing in the block area, creates a sloped ramp with blocks and rolls different toy cars down the ramp. Checks which car goes the farthest when rolling down the ramp. Pg. 61 Vol. 3
60 months	
TK	
Kindergarten	“Using a sentence frame, students predicted a ball’s pathway based on how they planned to push the ball: ‘I predict that when I push the ball ____, it will ____.’”
Grade 1	K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as need to solve a given problem.
Grade 2	3-5-ETS1-1. Define a simple design problem reflecting a need or an want that includes specified criteria for success and constraints on materials, time or cost.

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