2.1.5   Wallace & Gromit™

Challenge: Design and build a device that can deliver a person (LEGO® mini-fig) from a bed on the 2ⁿᵈ floor to the seat at the kitchen table on the 1ˢᵗ floor. The system should be activated by the rising sun (simulated by a flashlight). You can use either Inventor or Pilot mode, which will determine the Skill Badge you earn.

Skill Badges: | **Basic Pilot** | OR | **Basic Inventor** | **Basic Programming**

Procedures:

Experimental Setup: We highly suggested watching the Wallace & Gromit animated feature *The Wrong Trousers* as an introduction to this Challenge. Both a flashlight and the first floor of the house, including the table and chair, will be supplied by the instructor.

Robot Design: The only restriction is that the device used to transport the mini-fig must not be touching the mini-fig at the end of the challenge (i.e. you must let go at the end). You must build the second floor of the house, including the bed. This Challenge is more build-intensive than program-intensive.

Program: Your program must be activated by a light sensor. The program will most likely consist of turning motors on and off at specified times.

Grading:

Your grade will be based 70% on performance and 30% on creativity and aesthetics.

Performance	Creativity & Aesthetics
A: In the chair, not touching the floor	A+: Best of show
B: Touching the chair and/or table	A: Outstanding
C: Somewhere on the first floor	B: Good
D: In bed upstairs	C: Okay
F: You don't show up to class	D: Nothing special
	F: Divert your eyes!

Like always, you must receive a "B-" or better to earn the Skill Badge.

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