



# Children's Museum of Houston

---

## Pre/Post Classroom Activities

### A Day at the Racetrack



#### QUESTION:

Which angle will cause the car to roll at the fastest speed?

Independent Variable: \_\_\_\_\_

Dependent Variable: \_\_\_\_\_

Variables to control for: \_\_\_\_\_

#### HYPOTHESIS:

---

---

#### PROCEDURE:

1. Obtain a flat board (about 1.5 meters long) to make a ramp. Use masking tape on one side of the board to mark a starting line.
2. Use masking tape to mark a finish line on the floor, about 2 meters beyond the ramp.
2. Place one science textbook under one sight to produce a slight incline (the end with the starting line should be higher).
3. Hold the toy car so that the front wheels are just behind the starting line. On the word "Go" you should release the car and your partner should start timing.
4. Watch the racecar as it speeds toward the finish line. When the front wheels cross the finish line, say "stop" to signal your partner to stop timing.
5. Record the time in the data sheet and repeat the process twice more for trials 2 and 3.
6. Repeat steps 3-5, this time with two books under the ramp.
7. Repeat steps 3-5, this time with three books under the ramp.

Blackline Master C

Copyright ©2009 Children's Museum of Houston. All rights reserved.

**RECORD THE DATA:**

	Time (seconds) Trial 1	Time (seconds) Trial 2	Time (seconds) Trial 3	Average time (seconds) (Trial 1+2+3) ÷ 3	Speed Distance (meters) ÷ Average time (seconds)
1 book					
2 books					
3 books					

\* For your speed calculations, make sure you have an accurate measurement of the track, from the starting line to the finish line.

**DRAW A CONCLUSION:**

---

---