

# Score Sheet for 2015 Fluor Engineering Challenge

**1**

**Calculate the materials points:** the fewer items used, the more points scored.

$$\text{Material points} = (\# \text{ available} - \# \text{ used}) \times (\text{points per item})$$

Items	Quantity Available	Quantity Used	Quantity left over (# available - # used)	Points per left over item	Material points
CD	4			500	
Balloon	2			3,000	
Straw	2			200	
Pencil	2			100	
Paper	10			50	
Paper clip	6			10	
Tape <sup>1</sup>	1 roll			200	
<b>Total materials points</b>					

<sup>1</sup>Points for tape are not pro-rated based on how much you use. You may only receive 200 points if you do not use any tape.

**2**

**Calculate the weight points:** the more pennies the car supports, the more points scored.

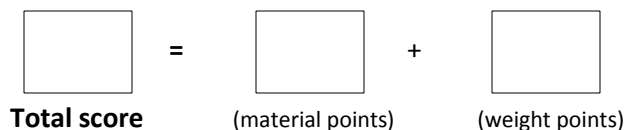
$$\text{Weight points} = (\# \text{ of pennies supported}) \times (\text{points per penny})$$

# of Pennies supported	Points per penny	Weight points
	x 40	

**3**

**Calculate the total score<sup>2</sup>**

$$\text{Total score} = \text{material points} + \text{weight points}$$



<sup>2</sup>For your score to count, your car must successfully travel from the start area to the finish area without any of the pennies going out of bounds. It is OK if parts of the car go out of bounds, as long as the pennies themselves stay in bounds. See the diagrams on the [Science Buddies website](#) for further explanation.