Balance beam 2

Which side exerts the greatest force?

5 Google forms
40 questions
Multi-choice

Balance beam - which side of the scales exerts the most force?

This is a series of 5 distance learning Google Forms each with 8 practice questions on identifying which side of a balance beam (set of scales) exerts the greatest force.

A balance beam (set of scales) is depicted graphically with a series of weights on either end. However, the pivot point (fulcrum) is off-center by varying amounts. Simply determine what will happen to the balance beam based on how much weight is on either side AND how far each weight is from the pivot point. Will it fall to the left (greatest force on the left side), will it fall to the right (greatest force on the right side) or will it balance evenly (all the forces balance out)? Three multi-choice options are provided with bold and clear graphics. Just click on the image that corresponds to your prediction to submit your response.

There are 5 Google Forms included in this virtual learning weights, measures and forces pack. Each question on each form features a set of scales and one or more specific weights of 1Lb, 2Lb, 5Lb, 10Lb, 20Lb and 50Lb and each with the pivot point in a different off-center location:

- Balance beam (Lb) f - weights up to 2Lb
- Balance beam (Lb) g - weights up to 5Lb
- Balance beam (Lb) h - weights up to 10Lb
- Balance beam (Lb) i - weights up to 20Lb
- Balance beam (Lb) j - weights up to 50Lb

Balance Beam (Lb) f - weights up to 2Lb

Study each balance beam closely and pay close attention to where the pivot point is (indicated by a black triangle). Note the pivot point may not be in the center of the beam! Which side of the beam has the most force exerted on it? You'll have to calculate this based on how much weight there is and how far that weight is from the pivot point. Will the beam fall to the left, to the right or will it balance evenly?

NOTE: Assume the beam itself has no weight and does not factor in to the calculation on how much force is being exerted. Only the weights and their distance from the picot point are relevant.

* Required

Enter your name or ID here: *

Your answer

F1. Which way will the balance beam fall? *

Balance Beam (Lb) g - weights up to 5Lb

Study each balance beam closely and pay close attention to where the pivot point is (indicated by a black triangle). Note the pivot point may not be in the center of the beam! Which side of the beam has the most force exerted on it? You'll have to calculate this based on how much weight there is and how far that weight is from the pivot point. Will the beam fall to the left, to the right or will it balance evenly?

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* Required

Enter your name or ID here: *

Your answer

G1. Which way will the balance beam fall? *