

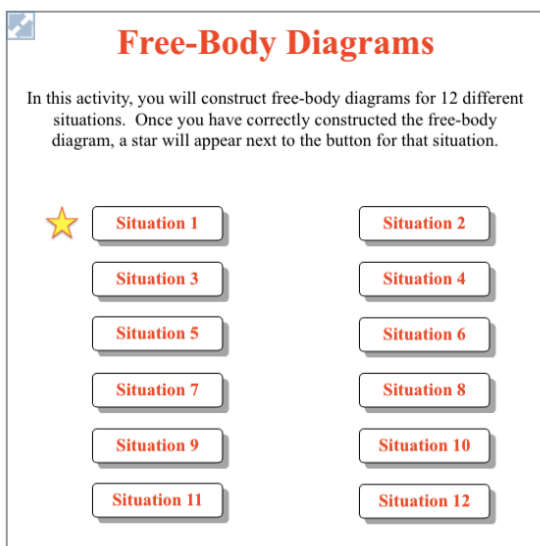
Free Body Diagrams Interactive

Purpose:

In this lab, you will construct free body diagrams for several different situations.


Go to <http://www.physicsclassroom.com/Physics-Interactives/Newtons-Laws/Free-Body-Diagrams/Free-Body-Diagram-Interactive>

Click on the gray arrows at the upper left corner to expand the window. Click on Situation 1 to begin.



When you enter Situation 1, use the buttons on the bottom left side to choose what direction to apply a force to. Use the buttons on the right side to determine the type of force applied. Use the return arrow when you’re done. A star appears next to each level you have successfully completed.

Select a button to add, remove or change a force. Use the Check button to evaluate your FBD.

Right	Left	None	Applied
Up	Down	Gravity	Air Resistance
	Check	Normal	Spring
Return		Friction	Tension

1. Draw the free body diagram for situation 1	2. Draw the free body diagram for situation 2	3. Draw the free body diagram for situation 3
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4. Draw the free body diagram for situation 4	5. Draw the free body diagram for situation 5	6. Draw the free body diagram for situation 6
7. Draw the free body diagram for situation 7	8. Draw the free body diagram for situation 8	9. Draw the free body diagram for situation 9
10. Draw the free body diagram for situation 10	11. Draw the free body diagram for situation 11	12. Draw the free body diagram for situation 12

13. When an object is in motion to the left, must there be a force in the free diagram pointing right?

14. When an object is accelerating, what must be true about the size of the forces in a free body diagram that are opposite each other?

15. When an object is in constant motion what must be true about the size of the forces in a free body diagram that are opposite each other?
