

Username

Please enter your User ID below:

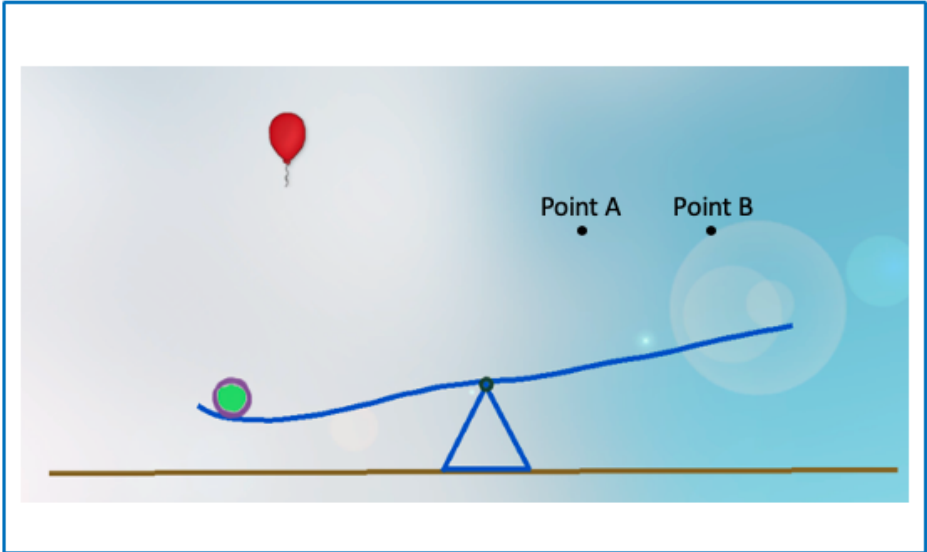
IMI abridged and random

Before you get to the physics questions, we want to know how you felt about the game. For each statement below, indicate how true that statement feels.

	Not at all true			Somewhat true			Very true
I would be willing to play the game again because it has some value to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed playing the game very much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I did pretty well in the game compared to other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would describe the game as very interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I didn't put much energy into the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel frustrated at all while playing the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was fun to play.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe playing the game could be beneficial to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt very frustrated while playing the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my performance in the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game did not hold my attention at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought the game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all true		Somewhat true		Very true	
I put a lot of effort into the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I couldn't play the game very well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was very relaxed while playing the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I didn't try very hard to do well in the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tried very hard in the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I am pretty good at the game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


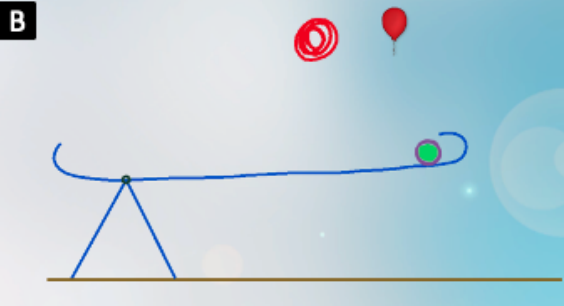
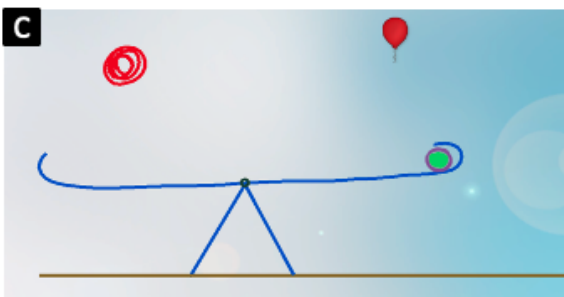
Near Q9 PoT Lever-Distance 1



Where should you drop a weight so the green ball is more likely to reach the balloon?

- ☐ A
- ☐ B
- ☐ No difference
- ☐ Not enough information

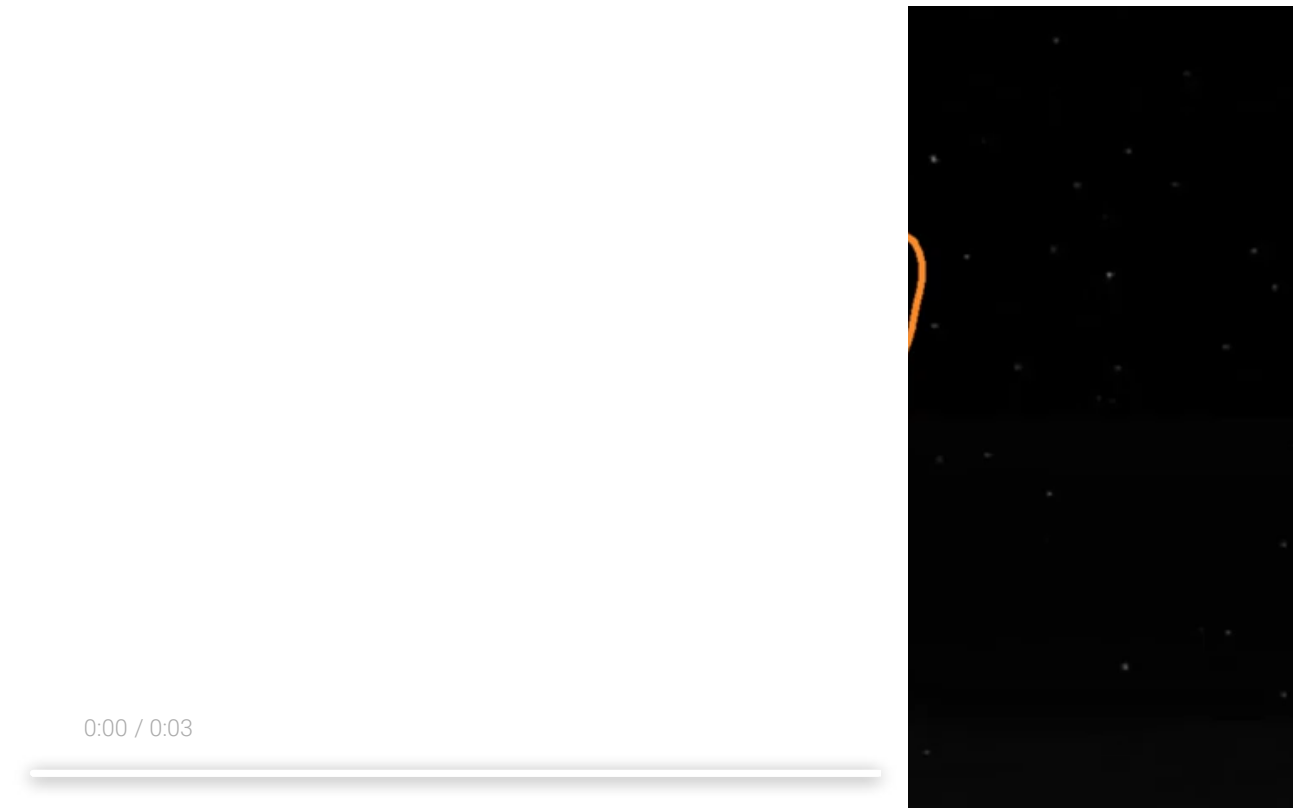
Near Q10 PoT-Lever-Distance 2

A 	B 
C 	<p>When the red ball drops, in which picture will the green ball hit the balloon?</p> <ul style="list-style-type: none">a) Ab) Bc) Cd) All would work

When the red ball drops, in which picture will the green ball hit the balloon?

- ☐ A
- ☐ B
- ☐ C
- ☐ All would work

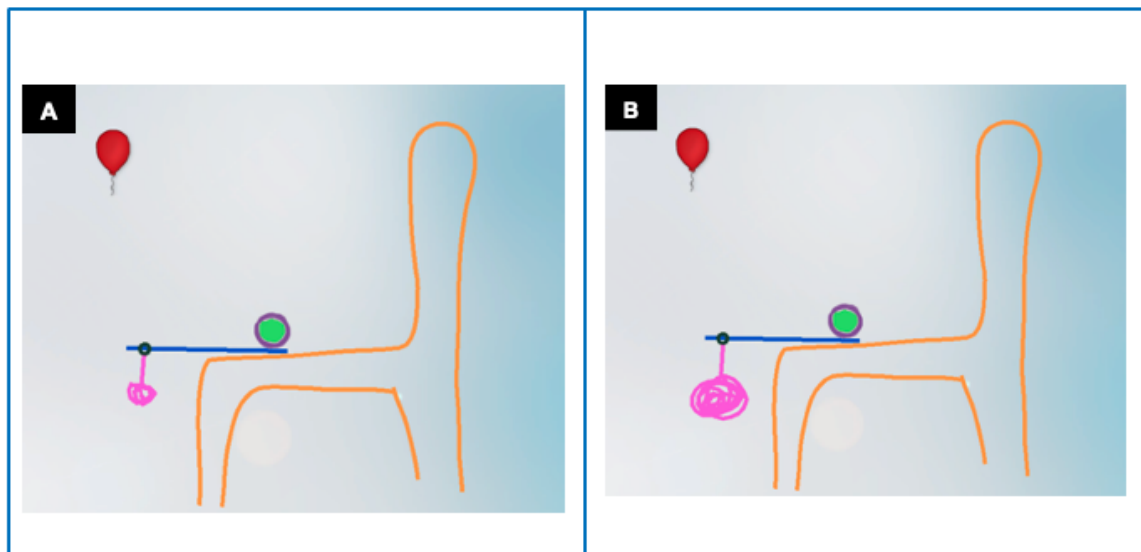
Near Q11 PoT-Lever-Mass 1



Watch the video. What would you change to get the ball to solve this level?

- ☐ Increase green ball's mass
- ☐ Decrease green ball's mass
- ☐ Make the blue stick shorter
- ☐ Make the blue stick longer


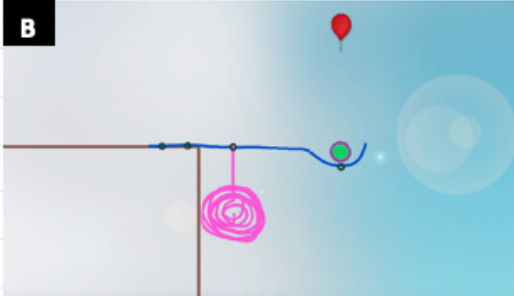
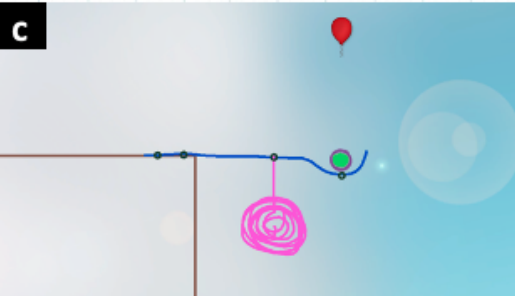
Near Q12 PoT-Lever-Mass 2



In which picture (A or B) will the green ball go higher?

- ☐ A
- ☐ B
- ☐ Both will reach the same height
- ☐ Not enough information

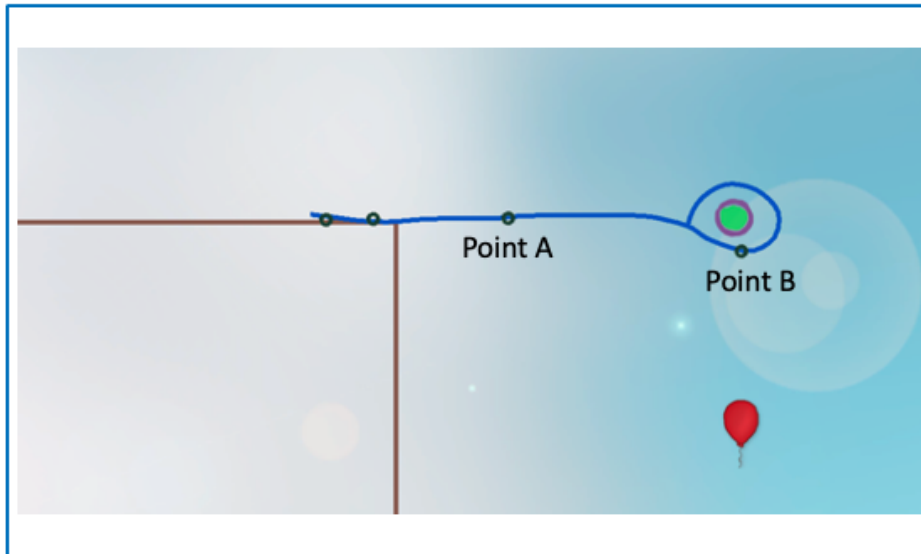
Near Q13 PoT-Springboard 1

<p>A</p> 	<p>B</p> 
<p>C</p> 	<p>Which green ball is <i>less likely</i> to reach the balloon after releasing the attached weight?</p> <p>a) A</p> <p>b) B</p> <p>c) C</p> <p>d) All would work</p>

Which green ball is *less likely* to reach the balloon after releasing the attached weight?

- ☐ A
- ☐ B
- ☐ C
- ☐ All would work

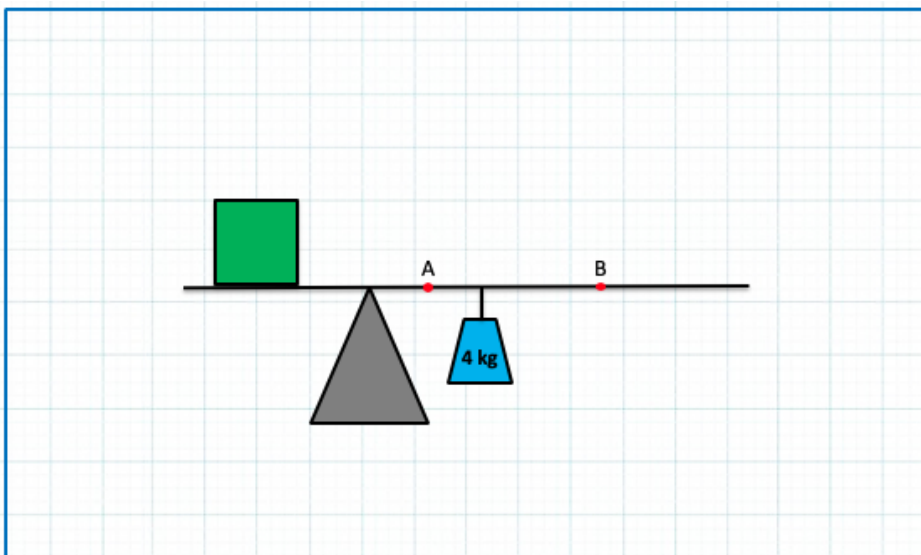
Near Q14 PoT-Springboard 2



Which one of the following solutions is *more likely* to make the ball reach the balloon?

- ☐ Attach a light weight on point B
- ☐ Attach a heavy weight on point B
- ☐ Attach a light weight on point A
- ☐ Attach a heavy weight on point A

Far Q9 PoT-Lever-Distance

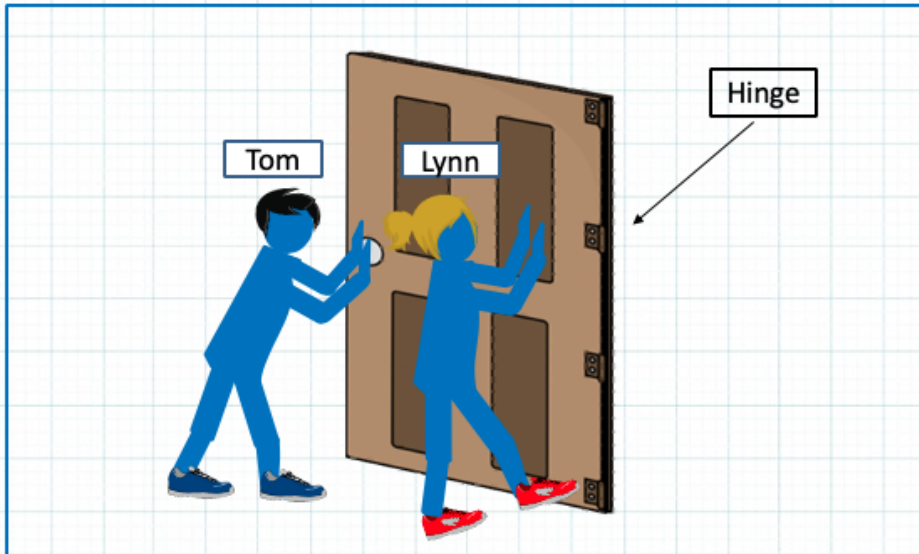


If the lever is balanced in the picture above, which of the following would cause the lever to go unbalanced?

- ☐ Replace 4 kg with 8 kg and move it to point A

- ☐ Replace 4 kg with 8 kg and move it to point B
- ☐ Both
- ☐ Neither

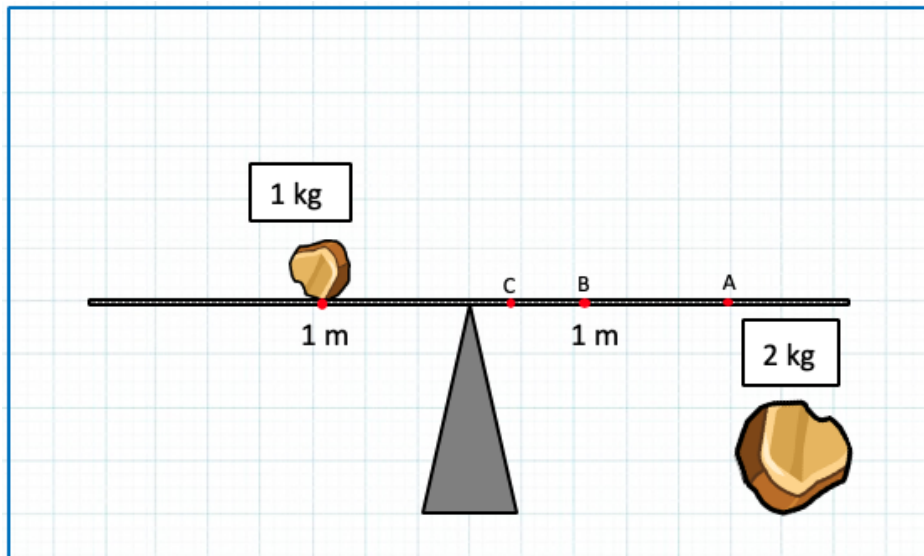
Far Q10 PoT-Lever-Distance 2



Tom and Lynn push a heavy door with the same force but at different positions. Who has the *least* effect on the movement of the door?

- ☐ Tom
- ☐ Lynn
- ☐ They both have an equal effect on the door's movement
- ☐ Not enough information

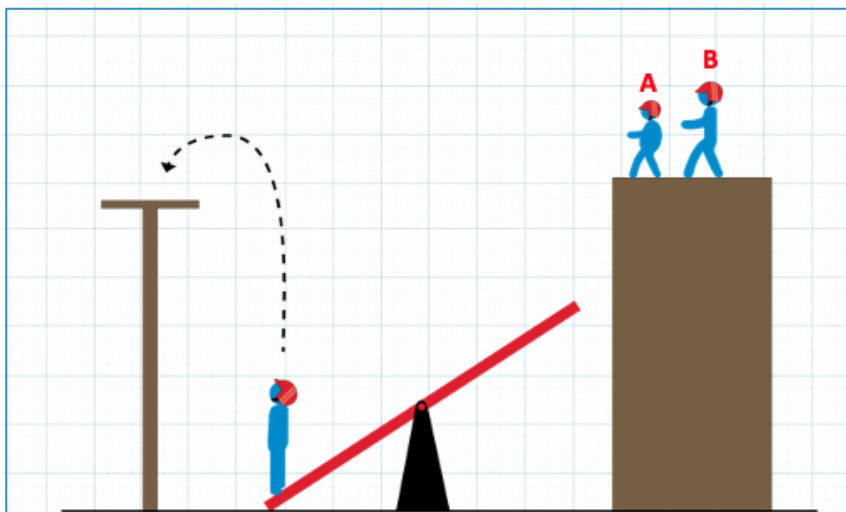
Far Q11 PoT-Lever-Mass



The 1 kg rock is 1 m from the fulcrum. The 2 kg rock is on the ground. How far should you place the 2 kg rock from the fulcrum for the lever to balance?

- ☐ Less than 1 m
- ☐ Greater than 1 m
- ☐ Equal to 1 m
- ☐ More information is needed to answer the question

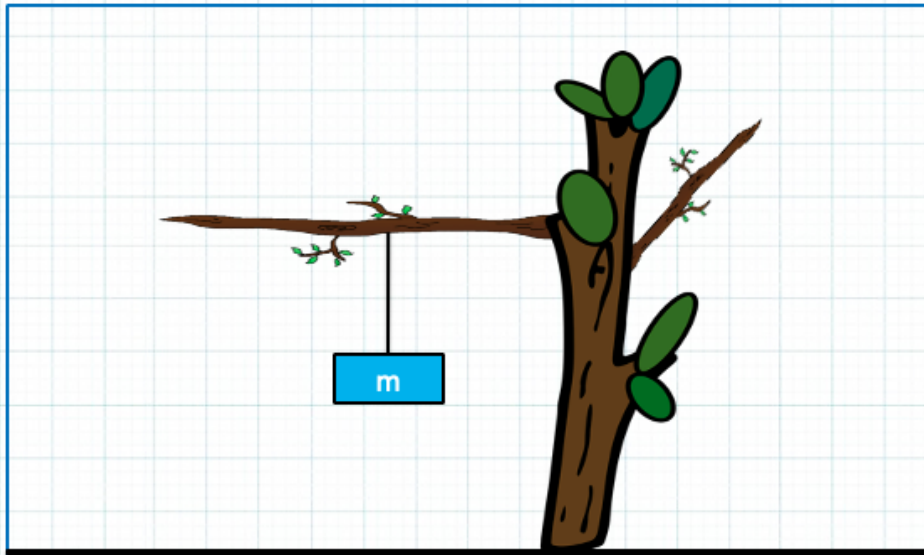
Far Q12 PoT-Lever-Mass 2



An acrobat needs to land on the platform above. At the top of another platform, two acrobats of *the same mass* are ready to land on the opposite side of the lever. Which acrobat (A or B) is *more likely* to launch the first acrobat onto the platform.

- ☐ A
- ☐ B
- ☐ Both will have the same effect on the acrobat
- ☐ Not enough information

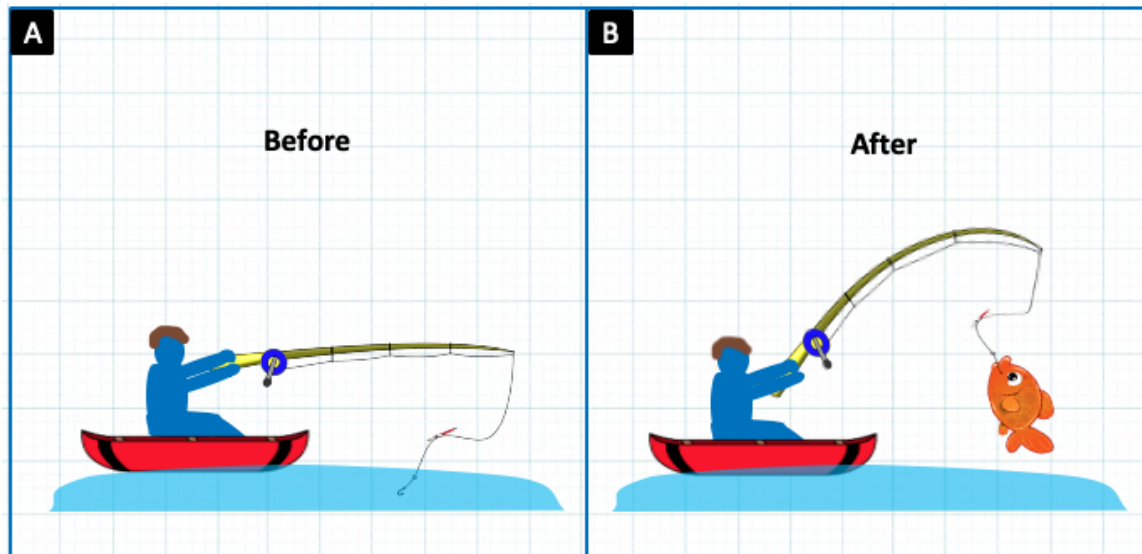
Far Q13 PoT-Springboard 1



An object is hanging on a tree branch. What would make the branch *less likely* to bend?

- ☐ By making the object heavier
- ☐ By moving the object farther from the tree trunk
- ☐ By moving the object closer to the tree trunk
- ☐ Moving the object won't make a difference

Far Q14 PoT-Springboard 2



A person is fishing in a stream. If the fishing pole was shorter, it would bend _____.

- ☐ more
- ☐ less
- ☐ the same
- ☐ more information is needed

Debrief

Please enter your User ID again:

You may have noticed while you were playing that sometimes a window opened offering a physics video to help. Here is an example of one of these physics videos:



ansfer

0:00

Did you see any videos like these while you were playing Physics Playground?

- ☐ Yes. I saw physics videos while I played the game.
- ☐ No. I did not see any physics videos while I played the game.

Support Questions

The following questions are only for people who saw physics videos.

The physics videos helped me solve levels.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

The physics videos helped me answer the physics test questions.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree

- ☐ Somewhat disagree
- ☐ Strongly disagree

The physics videos helped me learn some physics

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

I'd prefer to play the game without the physics videos.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

The physics videos were annoying

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

It was unclear how the physics videos were supposed to help me solve the level

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

The physics videos made me like the game more

- ☐ Strongly agree
- ☐ Somewhat agree

- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

Powered by Qualtrics