Does changing the length of the pendulum have anything to do with the period?

What is Needed

Two same-weight balls, suspended at differing lengths

What to Do

Be certain to do the ***Find the Period*** activity before beginning this activity. Let's see if the length of the pendulum has anything to do with its period, or the time it takes to make a complete swing.

Take on shorter-length stringed bob and one longer-length stringed bob in your hands at the same time and pull them in the same direction to the line on the base of the stand.
Let both bobs go at the same time.
Note what happens.

What is Happening

The shorter pendulum swings faster.
Since the bob on the shorter string doesn't have as far to travel, it travels the distance faster.

Other Things to Try

To prove to yourself that it is the length of the string, NOT the weight of the ball that makes the difference, try two separate trials.
Do the first with the same weight golf ball. Then repeat with the ball of a different weight.

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