Pendulum Challenge

Make this thing swing back and forth in 5 seconds.

Materials Needed
- string
- cup or small pail with a handle
- sand, for weight
- something tall and sturdy to hang your pendulum on
- stop watch or something to keep time

Instructions
1. To make the pendulum, tie some string to the handle of a small pail. If you're using a paper cup, make a handle by poking two holes opposite each other close to the lip of the cup. Put a piece of string through the two holes and tie a knot at each end.
2. Then tie a longer piece of string to the handle of the pail or cup.
3. Next, tie the other end of the long string to something tall like a branch. Make sure you have enough room to really swing your pendulum back and forth.
4. Once you fill the pail or cup with some sand your pendulum is ready for experimentation.
5. Now, see if you can get it to swing back and forth in five seconds. What will you need to change? The weight? The length of the string?