

Why do pianos go out of tune?

Several reasons. It honestly depends on how old the piano is and how well it's been taken care of. Generally three things contribute to how and why a piano may lose its pitch. The first is the strings, then there's the tuning pins, and finally the environment.

The strings are usually made of the highest quality steel available at the time of construction, but each one is under tremendous stress... usually between 150-200 pounds each. This constant strain tends to stretch the strings over a period of time. The tuning pins are the attachment point for the strings to the rest of the piano. The end of each string is wrapped around one of these small steel pins. These little pins (or pegs) are what we tuners spend most of our time on. When we tune a piano, we are making very small exacting adjustments to these pins. Each pin is screwed into the pin block... a large heavy block of wood that's an integral part of the frame. These pins are what is keeping each string under 150-200 pounds of stress. With this in mind, it's easy to understand why they may slip slightly every once in a while. This is especially true with older pianos that have spent most of their time in very dry, low-humidity environments. The reason here is because the wood in that pin block can eventually dry out over decades of low humidity. When this happens the holes for the pegs begin to gradually grow, and so can no longer provide sufficient holding power.

This brings us to our final factor: the environment. The average piano has around 234 strings, so the heavy iron and wooden frames collectively support around 18-20 tons of stress constantly. This makes the entire assembly sensitive to the temperature and humidity it rests in. Changes to temperature and humidity, especially sudden or constant ones, can have a simply huge impact on how well and how long any wooden string instrument can hold a tune.

What can I do to help my piano last and hold a tune longer?

Keep the temperature and humidity as steady as reasonably possible. The ideal numbers are 65-75 degrees Fahrenheit (room temperature), and 35-45% humidity. Again, this is ideal. A variation of plus or minus 10-15% on either variable will still produce good results. The big thing here is sudden changes. The best place for your piano is up against an interior wall well away from exterior doors and windows. The farther away from these (especially doors), the better. The textbook worst place for your piano is up against an exterior wall, next to an exterior door and under a window. If you simply cannot provide a good environment for your piano, it is possible to get good results using a small climate control system mounted INSIDE your instrument. It's not ideal, but can help... and may be your best option if all else fails.

The other thing you can do is play the piano! Regular use keeps strings and felt from becoming brittle and thus requiring replacement.