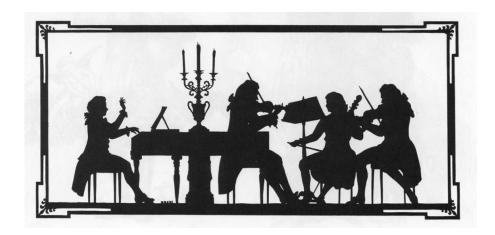
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### **Strings**

#### TYPES OF STRINGS AND THEIR CHARACTERISTICS

There are many brands of strings available today. The selection of the brand of strings should be left to the discretion of the teacher or performer. However, knowledge of the types of available strings can be helpful in making this decision. There are five types of strings in use today.

**GUT (NOT METAL WOUND)**—This string stretches very easily and is difficult to keep in tune. It is also sensitive to heat and humidity; therefore, it breaks often. This string is sometimes used by jazz bass players and players of authentic baroque instruments.

**GUT (METAL WOUND)**—This string has all the same characteristics of the non-metal-wound gut but to a lesser degree. Its tonal quality has, for years, been the preference of professional players. **Please Note:** Gut strings are made from sheep, not cats, even though they are sometimes called "catgut."

**SYNTHETIC CORE (METAL WOUND)**—This string has at its core a synthetic material that gives off a sound similar to the metal-wound gut string. Heat and humidity have little effect on this string; therefore, it is easier to keep in tune. Many professional players now prefer these strings over the metal-wound gut.

**STEEL CORE (METAL WOUND)**—This string has at its core a steel strand and produces a less mellow sound. This string is very easy to keep in tune and obviously is not affected by heat or humidity. This string has become the preference of many school orchestra programs, professional cellists, and bassists.

**STEEL (NO WINDING)**—This is a very inexpensive string and has a very harsh sound. This string is used mostly by fiddle players and is not recommended for school orchestra programs.

### False Strings

Some teachers replace a string only when it breaks or there is a noticeable physical deterioration of the string. This is not the only time you should change a string since it can become false (string stretched to an uneven thickness or gauge) and not show any obvious signs of deterioration. Signs of a false string are: (1) The string, when played with an adjacent string, will not produce perfect fifths (fourths for bass) at several locations on the two strings, even though the open strings are in tune with each other. (2) When you pluck or bow on the open string, there is not a clear tone decay that stays constant and/or the sound produced is of an indeterminate pitch.

Sometimes strings are left on instruments (especially basses) for years. Periodically check both school and student instruments for false strings.

## Bridge and Nut String Grooves

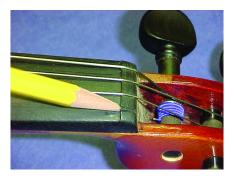
String grooves that are too narrow can sometimes pull bridges forward, resulting in a warped bridge. Also, a too narrow string groove on the bridge or nut may cause the string to pull apart, resulting in premature string breakage.





Use large end of rat tail file to widen grooves (careful not to deepen the grooves). Ideally, strings should have at least 1/3 their diameter above the top of the bridge and nut.





When changing strings, rub graphite (soft pencil lead) into string grooves and nut to lubricate them. This provides a smoother surface for the strings to slide.

The spacing between string grooves on the bridge and nut should be equal. Holding down fingers while playing an adjacent open string or playing some double stops might be difficult to execute if the string groove spacing is incorrect.

**PLEASE NOTE:** When changing all strings, be sure to do one at a time so you will not risk the possibility of the soundpost falling. Also, as you are tuning up the strings, constantly check for the bridge pulling forward.