String Materials

Listed below are some string materials with some of their key properties: their stretch or creep (permanent), elasticity (short term) and strength.

Dacron:	Low strength (50lbs per strand), quite elastic (2.6%), stretches under load. This material is often used for wooden bows as they require elasticity in the string.
Vectran:	Stronger than Dacron (70lbs per strand), low elasticity (0.8%), low stretch.
Dyneema & Spectra:	Very strong (100lbs per strand), moderate elastic (1%), some stretch.

Modern bow string materials generally consist of Dyneema/Spectra, or will be mixtures of Vectran, Dyneem or Spectra.

Number of strands

Apart from Dacron, that only needs 12 strands because of its large diameter, most strings will need 16 to 18 strands. The number of strands will depend on nock fit and the poundage of the bow.

Types of Serving

Stranded Nylon:	Cheap, wears easily, and does not lock to string well.
Monofilament Nylon:	Smooth, slick release, but easily comes undone.
Diamondback:	Very good for end servings (the loops), hard wearing.
Halo (BCY):	Slick release, quite thick diameter, colours wear quickly.
Angel:	Good thickness, smooth release, wears well.
Angel Majesty:	Has resin impregnated, does not move, good for release, but will leave mark on face (if using the black serving).

It is important to use the thickness of serving (combined with the number of strands in string) to give a good nock fit.

Nocking Points

Brass:

Easy to fit with a special tool, quite heavy (adding to string weight), can wear out tab quickly



Source: Google Images

Dental Floss: Tied on and can be permanent if properly tied and glued, lightweight, can last well but may fray eventually.



Source: Google Images

Serving Tied: As above, but difficult to glue into place. Good for adjusting nocking point for tuning purposes.



Source: Google Images

Bieter:

Very accurate, but difficult to place correctly, and needs to be served into place.



Source: Google Images

String Making

Recurve and Compound strings are all endless loop strings, made using a string jig.



Source: Google Images

Ends should be served over to lock them in place. Some advocate knotting the ends together. This is not advisable, as it leaves a lump under the serving and weakens the string (plus it is very difficult to get it tight).

Traditional Longbow strings are Flemish twist, with a laid in end loop at one end, and a bowyer's knot at the other. Others have both loops laid in. These types of strings take a bit more practice to get right.