WHAT TO CONSIDER WHEN SELECTING A NEW RACQUET

RACKET CLUB
CRYSTAL LAKE PARK DISTRICT

Classic parameters

Weight

The true mass of the racquet.

Measured when the racquet is not moving (even though our job is to make it move) AND held at the center of the racquet (where we don't hold it)

In general, heavier racquets are more stable, but more sluggish. However, it's the distribution of the weight that is more important. See parameter descriptions for **swing weight** and **twist weight**, below.

Balance

Simple means of assessing how the weight is distributed throughout the full length of the racquet.

The reading is indicating how far the center of mass (i.e., balance point) is from the butt cap oif the racquet.

Head-heavy racquets have a balance point over half way (i.e., over 13.5" = 34 cm) from the butt cap to the tip.

Head-light racquets have a balance point less than 13.5" (= 34cm) from the butt cap.

String pattern

The number of strings along the two axes of the racquet, including:

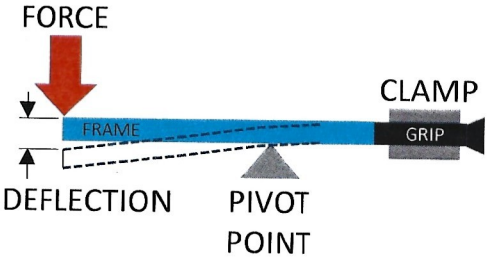
- **Mains** – the strings (typically 14, 16, or 18) that run along the length of the racquet
- **Crosses** – the strings (typically 18, 19 or 20) that run side to side

The main strings have the greatest impact upon ball response. The cross strings are primarily there to dictate how the main strings move upon impact.

Stiffness (RA)

Simple measure of deflection/ bending when force is applied to the tip of the tennis racquet (where we should never contact the ball)

It's easy for a machine to measure, but only part of the story.



Modern parameters

Swing weight

The perceived weight of the racquet when it is held at the grip and being swung.

A racquet with a little more weight near the tip of the racquet will feel heavier, but also provide more "plow through" on impact (like a hammer)

Low swing weight racquets will feel more speedy, but be a lot less stable on impact.

Two racquets of the same weight and balance can have very different swing weights depending upon how the frame was constructed.

Twist weight

A measurement similar to swing weight. It indicates the effort required to twist the racquet around the grip.

A high twist weight racquet will feel a lot more stable on off-center shots. **Large head size racquets** push the weight to edges of the frame and create higher twist weight. However, high twist weight racquets are harder to manipulate on serves and volleys.

The opposite is true for low twist weight racquets. Some players add weight (like lead tape) to the sides of a racquet to increase twist weight.

String spacing

The actual gap size between strings. Some racquets spread the same number of strings across a larger portion of the head, creating different gap sizes near the center of the frame, where we should be hitting the ball.

Larger gaps sizes create a softer sensation on impact and allow more bite to impart spin on the ball.

Smaller gaps sizes (often with high string count racquets) feel more solid and create a more predictable, flatter ball trajectory. However, they generally offer less spin.

True feel

The true feel of a racquet is the combined effect of:

- Beam flex (RA) of the end of the racquet about the midpoint
- Engineered flex throughout portions of the hoop
- Effective stiffness of the string bed, which is influenced by string spacing and string configuration (strings + tension)
- Dampening materials in the lay-up and inner core of the frame

There is no man-made machine that measures this well. Luckily, Mom gave you a beautiful machine to use when trialing a new frame and the club has a demo program.