There are many variations thrown in the major leagues, but these eight pitches form the foundation.

**Four-seam fastball**

ALSO KNOWN AS: (Several fastball terms)
Features: Three seams, middle of the ball, big day
AVERAGE SPEED: 90-105 mph
WHICH MARINERS THROW IT: (ALL FASTBALLS:) Pedro Martinez, Boston; Troy Percival, Anaheim; Santos Colbe, Cleveland

**WHAT IT DOES:** The most basic fundamental pitch, this is the only one thrown by everyone. It is the weapon pitch to locate (if you want where you want it). The four-seamer is thrown at maximum velocity, with the ball coming off the first four fingers and rotating to the top 90° (12 o’clock) or moved off the ball as desired. It gets its name from the way the fingers line up toward the bat, and that’s what the batter is looking for to identify the pitch.

**Two-seam fastball**

ALSO KNOWN AS: Slider
AVERAGE SPEED: 89-98 mph
WHICH MARINERS THROW IT: (All Fastballs) Gaston, Halama, Horner, Moyer, Percival, Sele

**WHAT IT DOES:** For the two-seamer, the first and second fingers lay across the same area between the two seams (as shown as asterisk symbols). It is thrown the same way as the four-seamer, but the difference in the pitch occurs at the release. When a four-seamer rotates 45°, the two-seamer rotates 60° and becomes a pitch that is equally fast and difficult to time, and even if you know when it’s going to get there, there’s no way to predict where it’s going to be. Dick Allen, a star first baseman in the "50’s and 60s,” said the Willie Mays once told him to take your swings and sit down: "I’m afraid if I even think about hitting it, I’ll mess up my swing for life.”

**Changeup**

ALSO KNOWN AS: Off-speed pitch, slider, two-seam, hard knuckler
AVERAGE SPEED: 7 to 19 mph slower than fastball
WHICH MARINERS THROW IT: (Changeup) Gaston, Halama, Horner, Moyer, Percival, Sele

**WHAT IT DOES:** The changeup is the great impostor, meant to look like the fastball, but coming in slower to throw off the batter. The arm motion and release point are ideally the same as the fastball, but are different in the grip. The most common grip is some form of the "split-finger," in which the thumb and forefinger touch to create a circle on the side of the ball, which sits back close to the palm. The remaining fingers are spread around the ball. When the fastball leaves leverage to impart force and spin causing first two fingers, the changeup imparts the force at the sides of the ball, concentrating it in the middle of the ball. Variations on the grip include, with the ball laid flat in the palm, and the forefinger or a pitch change, in which fingers are spread evenly around the ball, without the thumb and forefinger circle.

**Curveball**

ALSO KNOWN AS: Harner, yarner, turner, wobblor, wpun
AVERAGE SPEED: 8.1-9 mph slower than fastball
WHICH MARINERS THROW IT: (Cureaveball) Gaston, Halama, Horner, Sele, Sele, Moyer, and Abbott have the pitch. But generally throw fewer than the five game.

**WHAT IT DOES:** The curve is unique in that it rotates from top to bottom, rather than from bottom to top as the fastball. This becomes extremely harmful (thrown effectively), if the direction of the fingers changes on the ball, thus it’s thrown with the wrist cocked so that the hand is in a Y. With the arm coming down, the ball rolls over outside of the first finger, causing a downward spin. The curve sits dramatically and can be thrown for a strike on a "new pitch." Depending on the arm position of the individual pitcher — straight up over the top or more sideward — the ball might also break across the plate and wind up outside. On this pitch, leaving the hand speed to transfer leverage in the front of the ball in more important arm strength.

**Slider**

ALSO KNOWN AS: No common nickname
AVERAGE SPEED: 4-6 mph slower than fastball
WHICH MARINERS THROW IT: (Slider) Abbott, Charlton, Franklin, Halama, Nelson, Peraza, Percival, Rhodes, Sele,

**WHAT IT DOES:** The slider is the middle-fastest pitch to the fastball, and it is on a tight spin on the elbow (spin on the elbow, plus a pronounced fake break and dives early in a tight-breaking pattern). The slider is thrown for a strike or to try to get both at the same time and is used to break up the batters’ timing. The spin is not straight through the ball, but off center of the ball, and then the spin will eventually cause the ball to "nap off" at a downward angle a bit on the plate, and the slider is better than the fastball, but the closer a pitcher can get to throwing it without much of a dip, the better.

**Split-finger**

ALSO KNOWN AS: Splitter
AVERAGE SPEED: 4-6 mph slower than fastball
BEST IN THE LEAGUE: Tim Hudson, Oakland

**WHAT IT DOES:** The splitter is in very tight rotation and good velocity and dives straight down the last second pitch is similar to the two-seam fastball, but with the fingers spread further apart to change the rotation and add break. This pitch is generally not thrown for strikes, but is used to throw a mis-hit or for strikeouts.

**Forkball**

ALSO KNOWN AS: Fang
AVERAGE SPEED: Yams, as fast as 75-80, but usually slower
WHICH MARINERS THROW IT: (Forkball) Charlton, Sasaki, Seattle; Gordon Kenney, New York

**WHAT IT DOES:** For the fork, take the split-finger grip and spread the fingers out as far as possible so that they are at the sides of the ball, and the ball slams two times toward the plate. The pitch was allegedly invented by Dave Kane, a pitcher from 1931-22 who held the ball between his index and fourth fingers because he had lost the middle finger in a childhood accident. This grip takes a lot of velocity off the ball but causes an extreme break. Like the splitter, the feel is not thrown for strikes or mis-hits, but to get the hitter to commit to his swing and not have time to adjust to the ball. The forkball is the pitch that has thrown the game of baseball. ... You can see the spin, but unless you anticipate it or the batters already know it, it’s not much chance of hitting it suddenly.

**Knuckleball**

ALSO KNOWN AS: (Several names examples)
AVERAGE SPEED: Rarely above 90s to 70s
WHICH MARINERS THROW IT: Nasty Tim "Timmy" Wakefield, Boston; Bob "Boston’s Tim Wakefield is the most effective knuckleballer of his generation. Detroit’s Three Innings is the only other AL knuckleballer on the disabled list.

**WHAT IT DOES:** The knuckler is rare, difficult to learn, difficult to control and even more difficult to hit. Gripped with the tips of the first two fingers on top and anchor to the middle fingers in the bottom, the knuckler is pushed to the side of the release. There is ideally no spin up, and the arm motion against the wind and break of the ball are the same.

"Like some cult religion that barely survives, there has always been at least one rarely fewer than five or six devoted throwers in the major leagues. Not only can’t pitchers hit it, catchers can’t catch it, coaches can’t teach it, and most pitchers can’t learn it. The perfect pitch."—Ron Luciano, former AL umpire