

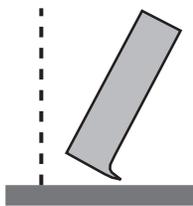
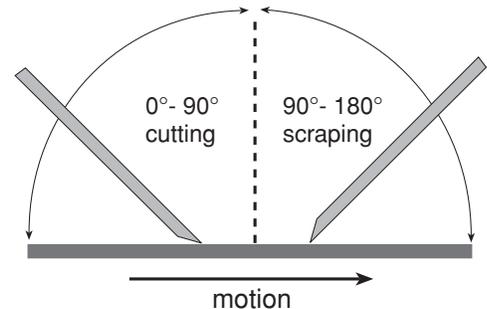
# Cutting vs. Scraping



**Q** What's the difference between cutting and scraping? My neighbor got a copy of your article "Life after Sandpaper" and pointed out the claim that card scrapers are actually cutting tools. If scrapers don't scrape, what does?

**A** I was disappointed years ago when I couldn't find an answer anywhere to exactly the same question. Never afraid to leap in where more angelic lexicographers fear to tread, I made up my own arbitrary definition:

Let the angle at which an edge approaches a surface determine whether it is cutting or scraping. An angle of approach lower than  $90^\circ$  means the edge is cutting. An angle of approach greater than  $90^\circ$  constitutes scraping. Cutting is characterized by continuous shavings, leaving surfaces smooth on a very small scale. Since fibers are being lifted from the wood, tearout is possible. Scraping generates more broken fragments than shavings, leaving surfaces somewhat torn and roughened on a very small scale. Since fibers are being pressed against the wood, tearout is virtually eliminated.



This is an arbitrary definition and as such may be subject to dispute, but we've found it as useful a way as any to answer your question. Now it should be clear why I claim that a properly burnished card scraper is actually a cutting tool. Though the card itself may be held at approximately  $120^\circ$ , its tiny burr approaches wood at an angle just a little higher than  $25^\circ$ , lifting clean, ultra-thin shavings and leaving surfaces practically in finished condition. The hardened blade of a scraping plane, on the other hand, is not always formed into a burr after sharpening. Thus it is presented to the wood at an angle of  $90^\circ$  to  $110^\circ$ , performing a true scrape.

*Zach Etheridge*