



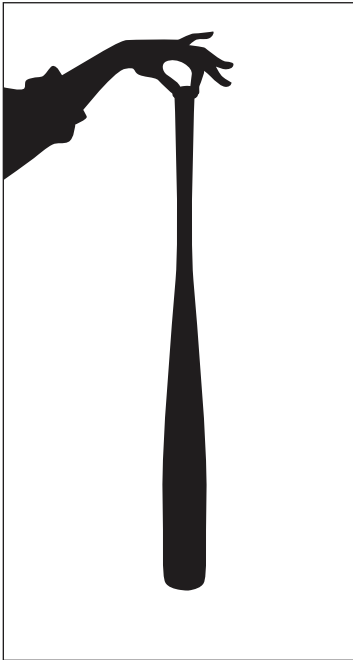
devon **olsson**

FINDING THE SWEET SPOT

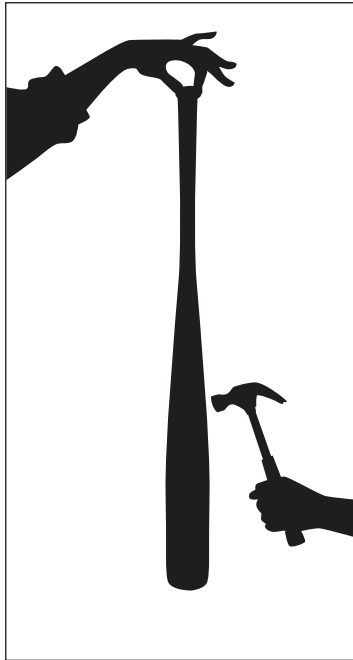
WHAT IS THE SWEET SPOT?

BASEBALL PLAYERS TRY TO HIT A BASEBALL ON THE SWEET SPOT OF THE BAT BECAUSE HITTING THE BALL ON THAT SPOT MAKES THE BALL GO REALLY FAR!

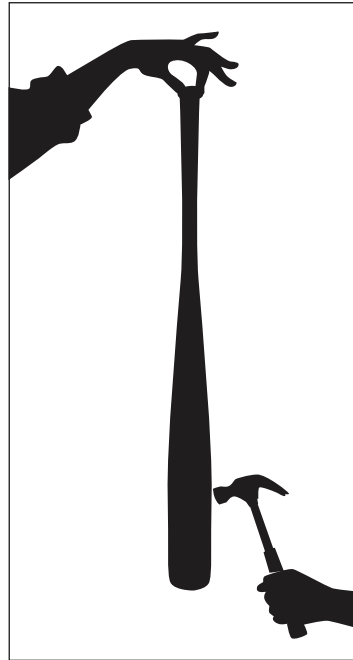
MATERIALS: WOODEN BASEBALL BAT, HAMMER AND MASKING TAPE



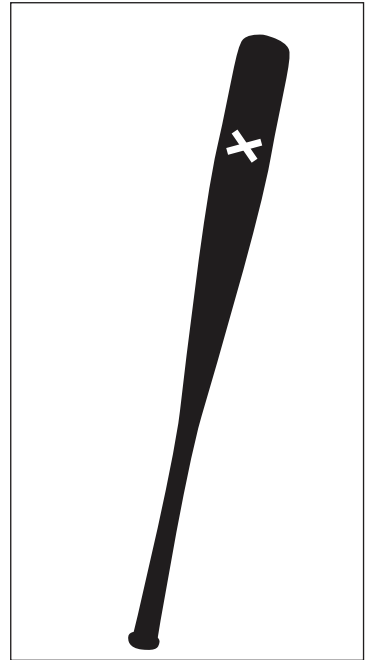
TO FIND THE SWEET SPOT ON YOUR BASEBALL BAT, HOLD THE BAT LOOSELY BETWEEN YOUR THUMB AND FINGERS SO THAT IT IS HANGING DOWN TOWARD THE GROUND.



HAVE A FRIEND GENTLY TAP THE BAT WITH A HAMMER EVERY INCH OR SO STARTING FROM THE MIDDLE OF BAT AND WORKING THEIR WAY DOWN.



AS YOUR FRIEND TAPS ON THE BAT, YOU WILL FEEL VIBRATIONS TRAVELING UP THE BAT TO YOUR FINGERS. BUT WHEN THE HAMMER FINDS THE SWEET SPOT, YOU WON'T FEEL VIBRATIONS.



DOES THE HAMMER MAKE A DIFFERENT SOUND WHEN IT TAPS ON THE SWEET SPOT OF THE BAT? MARK THE SWEET SPOT WITH A SMALL PIECE OF MASKING TAPE.

READY FOR THE SCIENCE SCOOP?

WHN YOU HIT THE BAT WITH THE HAMMER, IT PUSHES THE BAT SIDWAYS A LITTLE AND MAKES THE BAT BEND. THE BEND IS SO SMALL THAT YOU CAN'T SEE IT. BUT IT BENDS AND UNBENDS REALLY FAST - SO FAST THAT YOU CAN FEEL IT ALL THE WAY UP TO YOUR HAND.

IF YOU HIT A BAT AT THE SWEET SPOT, THE BAT DOESN'T BEND AS MUCH, SO YOU DON'T FEEL ANY VIBRATIONS IN YOUR HAND. BECAUSE ENERGY IS NOT WASTED ON VIBRATIONS, MORE ENERGY TRANSFERS TO THE BALL, MAKING IT GO FASTER AND FARTHER.