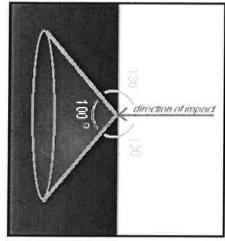
Hard Hammer Percussion

Chip Away, Chip Away at the Stone

rock that flakes are knocked off of. The core itself may be turned into a tool, but more likely the flakes eventually be knapped into tools. Some terms need to be defined at this point. The core is the chunk of process. Hard hammer percussion is used to remove the cortex from the core and the flakes which will become the tool. Cortex is the outer 'skin' or 'rind' of the raw material. Using a Hammer Stone large flakes are struck off of a core. This is the initial stage in the reduction

three rules: play the game. To begin removing flakes with a hammerstone you will have to be familiar with these in advance, the masters think several moves ahead, and you must be familiar with the rules in order to Flintknapping has been likened to chess - you think about what you are doing, you plan your strategies

1. Conchoidal Fracture

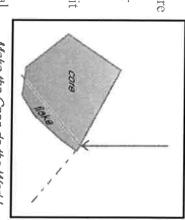


Hertzian Cone / Cone of Force

The stones we use for flintknapping, (flints, cherts, obsidian, etc) all exhibit a characteristic fracture when broken – called a conchoidal fracture. When you strike the surface of the stone you are applying a force to the surface. This force spreads out from the point of impact like ripples spreading out in a pond. The force is also directed into the stone, so as the force spreads outward it also travels inward. What is produced is a cone, with the pinnacle at

the point of impact and the widest part somewhere inside the rock. This is called a *Hertzian cone* or the *cone of force*. If you do this in the middle of the stone, unless you hit it

and tilt the core up or down to change the angle. Luckily for us, practice, I find it easiest to keep the direction of the blow vertical, stone so that only part of the cone passes through the core. In The trick is to angle the blow and apply it near the edge of the VERY hard the force will dissipate without detaching a flake.



Make the Cone do the Work!

these cones always tend to be about the same shape so the angles don't change and once you learn how to make the cone work for you you've got it made! The angle that the flake detaches is about 130 degrees to the direction of the strike.

2. Near 90 degree platforms



The platform is the part of the core you strike to remove a flake. To find a potential platform on a core you want to look for a place where two faces meet at an angle of 90 degrees or less. It can not be greater than 90 degrees because of the way you are going to use the cone of force to work for you.