

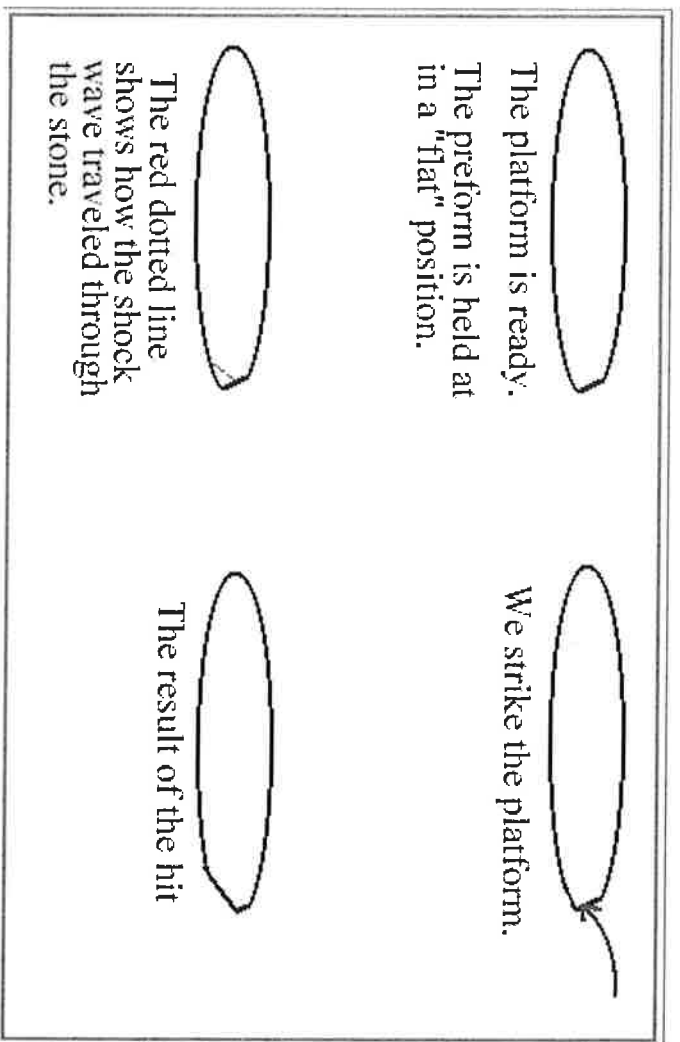
Some Talk About Angles

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Okay...by now you've learned about herzian cones. You know that it is a cone shaped shock wave with sides that expand outward 130° to the point of impact on the stone. You know we use this shock wave, created from a billet strike, to make flakes come off knappable stone. But now we need to learn how to "cheat the angles" to make the best use of this shock wave.

After much practice you have probably standardized your billet swing so that it is coming down at pretty much the same angle all the time. This swing has become natural to you. You are hitting your platforms pretty much the same every time. Since this swing has become a constant, we have an opportunity to have some control over the thinning process and the length of the flakes we take off.

If you tilt your preform at different angles you can control how long your flakes are and how much material you remove. Depending on how much material you are trying to get through you may have to adjust the power of your strike as well. But a lot can be accomplished by understanding how to use different angles. The illustration below depicts a preform as viewed from the base end. The angle of the strike is indicated by the red arrow. Let's see how the shock wave travels through a stone that's held at this "flat " angle.



Well, the flake came off. And as you can see, we ended up with a rather shallow result. If we continue hitting our platforms with the preform held at this angle, it will get smaller and stay thick. We will get points that look like "turtle backs." This won't do will it? Well, let's change the angle we hold the preform at and see what happens.