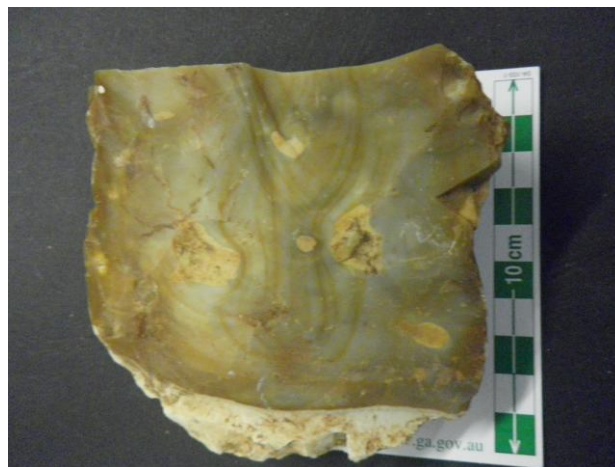


Aboriginal Stone Tools – Teacher Notes

Aboriginal people are the descendants of an early wave of modern humans who moved out from the savannahs of Africa about 70,000 years ago, crossed the great grasslands of Asia and arrived on the northern shores of Australia about 40,000 years ago. They were hunter gatherers, the men hunting large game such as kangaroo, emu and turtles whilst the women hunted smaller game such as lizards and collected shellfish, seeds, fruit and roots. They moved constantly within their own part of the country following game, water and seasonal food

Stone tools

Early humans studied rocks and found the best mineral to produce a sharp cutting edge or piercing point was quartz. Quartz occurs in many varieties. Vein quartz produces clear crystals and white masses.

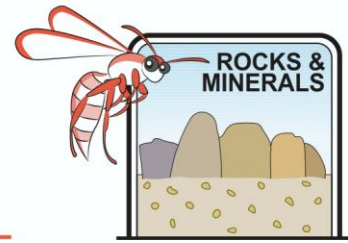


Chert nodule

Chert and flint are precipitated from silica rich solutions and form veins, fill cavities and replace masses in a variety of rocks. In warm conditions silica (SiO_2) will dissolve from rocks and move with groundwater to be deposited as hard mottled bands and nodules. When hit they produce a sharp curved conchoidal (shell shaped) fracture. Humans no longer had to wait and scavenge after carnivores had finished eating to gain meat. Sharp stones could pierce pelt and cut meat. Meat provides protein for brain and muscle development. Melting ice after the last glacial advance left vast savannas rich in grazing animals.



Classic Palaeolithic stone hand axe (the "Porche" of tools)



Aboriginal Stone Tools – Teacher Notes

Core tools are made by knocking pieces away from the original rock whereas flake tools are worked slivers struck from the core. In both cases the original shaping would be made by hitting rocks together whilst the final shaping would employ a piece of bone or wood to nibble at the rough edges.



Discarded partly worked pieces of quartz (white) and chert (yellow) from Little Sandy Desert. These are flake tools with “nibbled” or reworked edges.

Aboriginal people rarely carried stone tools. Tools for butchering game would often be made from rocks found near that location. Larger stone tools such as seed or pigment grinding rocks would be left at site for use in later visits.

In the absence of quartz, any fine grained rock including quartzite and dolerite would be used. For grinding seed and ochre such coarser grained rocks were preferred. Seeds were moved in a yandy or coolomon to separate sand and chaff from seed then laid on a flat rock and pounded and rolled by a round rock.

Most tools were made close to the spot where they were needed and discarded after use. Larger tools such as grinders and anvil rocks were left in shady spots for re-use in later years. Any tools found in the bush may be photographed but should be left where they lie and reported to local elders.

More information on stone tool making can be found in the “Minerals and Crystals” package on the ESWA website. <http://www.earthsciencewa.com.au/> These free kits provide minerals, teacher’s guides and student activities and include locations of schools where they are currently held.



Rock knife courtesy of Michelle Proctor