

Cartier brooch. Citrine and gold, c. 1940. (Photo: WL)

**Citrine** – the majority of citrine is actually heat-treated amethyst called 'burnt amethyst'. The colour change is permanent, often banded, but lacks the dichroism of natural yellow quartz. However, if citrine is irradiated, it converts back to amethyst.



Citrine. (Photo: KW)

Citrine also comes in a range of shades from pale to dark yellow and brownish, where it merges into Cairngorm or smoky quartz. It is often sold, wrongly, as yellow topaz but lacks the polish and brilliance. Clear quartz is now dyed to provide yellow shades and sold as citrine. Natural citrine does occur, but only rarely. Lemon and Orange Citrine have been treated.

Despite their relatively low price, amethyst, ametrine and citrine stones make a lovely display in a range of jewellery.



Orange Citrine. (Photo: ATG)

Rock crystal – this is transparent colourless quartz that has been used as a diamond simulant, though not very convincingly. It is glasslike in appearance and can easily be confused with glass. Quartz, like most natural gems, has a higher thermal conductivity than glass; therefore the tongue test (as described under the section on diamond) should pick out the difference. It is important that the material being tested is are held with tweezers rather than held in the hand, to avoid accidentally warming it. The test is momentary so the quickest of touch should give a result, i.e. the glass will feel warmer than the natural stone.

Rock crystal has often been the subject of large carvings in history and forms the best quality crystal balls used by fortune-tellers. In Sri Lanka it has long been used to make lenses for spectacles. It also has use in specialist lenses for optical instruments and as part of doublets and triplets.

Asteriated quartz occurs displaying 'stars' similar to ruby and sapphire. With correct lighting they can be very attractive. 'Venus Hair Stone' is quartz with needlelike inclusions of red or golden rutile, also called