



JADE

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Stone of Heaven

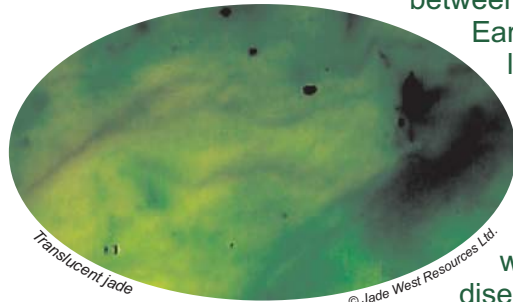
Jade is a green, translucent gemstone. Its hardness, toughness, and beauty have led to many uses as tools and jewellery for thousands of years. Jade objects represented great wealth and power in the world's three great jade cultures: the Chinese, the Maori of New Zealand, and the Olmec, Maya, and Aztec people of Central America. In China, jade represented the link

between Heaven and Earth. The Maori

launched canoe expeditions to

search for jade and used it to make fearsome war clubs. Aztec nobility wore bright green amulets around their waists in the belief that this would protect them from kidney

disease. These ancient civilizations prized jade above gold and silver.



Translucent jade

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Jade sculptures and jewellery

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British Columbia Geological Survey Branch

A Tangled Web . . .

The gemstone known as jade is actually not a single mineral type, but two: nephrite (a silicate of calcium and magnesium) and jadeite (a silicate of sodium and aluminum). They are similar to each other in appearance and hardness, but it was not until 1863 that a French chemist was able to distinguish between the two. However, by then it was too late to straighten out the mineralogical tangle and scientists agreed that the term jade would be used for both.



"Emperor's Stone", a 5 tonne boulder from the Polar Jade mine, polished in the shape of a tree

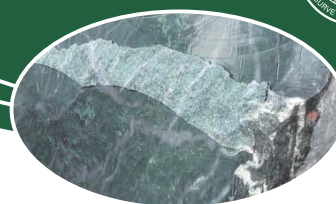
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Nephrite is one of the world's toughest materials—you cannot scratch it, it's as hard as steel, and it's very difficult to shatter, so very delicate shapes can be sculpted without risk of them breaking. It can be cut so thin that light passes through.

Nephrite was the jade revered by the Chinese for over 7000 years, until the 1700s when China's own supplies dwindled. Since then, large quantities of jadeite have been exported to China from Myanmar and jadeite became the material most commonly used by Chinese jade carvers.



JADE

Canadian Jade

Nephrite has been used by aboriginal people in Canada for thousands of years for axe heads, knives, and other tools. Nephrite artifacts dating back 4000 years were discovered at Salish cultural sites near Lillooet, British Columbia. Nephrite artifacts have been found over much of the Arctic coast and on the Arctic Islands. An Inuit adze, found on Victoria Island, has a nephrite blade bound to a bone handle.

Canada has the world's largest proven reserves of nephrite, enough to supply world demand for 300 years. Most of Canada's nephrite is found in British Columbia and the Yukon along a belt



Copper Inuit adze with jade blade, Victoria Island

Royal Ontario Museum, with permission © ROM

trending northwest from the US border near Hope, B.C. to the Yukon, north of Watson Lake. Minor amounts of nephrite have been found in Newfoundland.

British Columbia's nephrite is found in more than a dozen shades, depending on trace elements such as iron, chromium, and manganese, ranging from white to near-black, but the most common colour is green. Only about 20% of the nephrite found is gem quality. The rest is good for carving and ornamental stone.



Jade fireplace

© S. McKeowan, Sld Rock, Yukon



Jade incense burner

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DID YOU KNOW?

- Jade is the official gemstone of British Columbia
- Nephrite is too hard to carve using chisels: it is sawn and polished using diamond-tipped tools and abrasives
- Jade polishing techniques and compounds are closely guarded secrets
- The surface of a jade boulder is grey or brown, and it's only when it is cut that the colour is revealed
- The largest piece of nephrite ever found is from B.C. – 'Big Papa' is a boulder that weighs about 152 tonnes and is worth over a million dollars
- Polar Pride: The world's largest piece of gem-quality nephrite is an 18-tonne boulder (4.3 x 2.0 m) – it will be carved into the world's largest solid jade statue of Buddha for a temple in Australia

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Diamond-tipped saw, cutting jade boulder



"Polar Pride" jade boulder, from the Polar Jade Mine, near Dease Lake, British Columbia

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