

# GOING FOR GOLD

Gold is a valuable metal, partly for its use in jewellery. But it is also a vital material in electronics because of its electrical conductivity and resistance to corrosion.



The Super Pit at Kalgoorlie, Western Australia, is 3.5 km long and almost 600 m deep. It produces about 20 tonnes of gold each year, plus 20 million tonnes of spoil. The town has grown to meet the edge of the mine site.



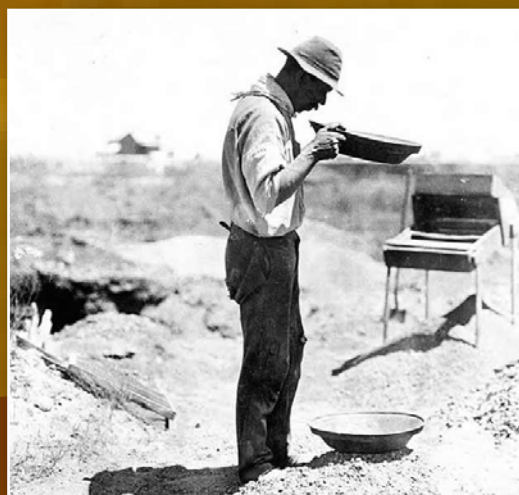
Core samples are analysed for their gold content. Gold is present as gold telluride ( $AuTe_2$ ) but, in the ore, just one atom in a million is gold.



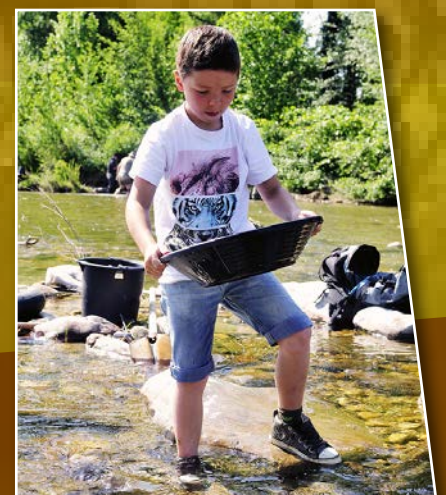
The pouring of gold bars is the final step in a long process. For each gramme of gold extracted from the ore, a tonne of ore must be processed.



Kalgoorlie is 600 km across the desert from the coast at Perth. Esperance was established as a port for exporting minerals in 1893.



Kalgoorlie was the centre of a gold rush in the 1890s. Prospectors obtained a licence to 'stake their claim' before searching for flakes of gold in the desert dust.



Gold can be found in small quantities in many European rivers. This boy is a contestant in a gold prospecting competition, river Gardon, France.