

# Mineral Resources – Teacher Background

## We live in a resource rich state and in a resource rich country!



Gold in quartz

## World commodity production 2011 (excluding oil & gas)

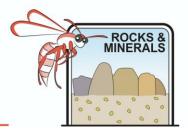
| <i>7</i> 1      |       | · 0 0 /   |         |              |
|-----------------|-------|-----------|---------|--------------|
| Commodity       | WA    | Australia | World   | WA% of world |
| Iron Ore (Mt)   | 427   | 441       | 2,080   | 21           |
| Alumina (Mt)    | 12    | 10        | 87      | 14           |
| Nickel (000t)   | 212   | 212       | 1,580   | 13           |
| Garnet (000t)   | 150   | 150       | 1,400   | 11           |
| Zircon (000t)   | 106   | 762       | 1,442   | 7            |
| Gold (t)        | 180   | 258       | 2,763   | 6            |
| Ilmenite (000t) | 726   | 1,277     | 11,310  | 6            |
| Diamond (000ct) | 7,562 | 7,562     | 144,000 | 5            |

Western Australia accounted for 70% of Australia's export merchandise to China. In the same period 8.2% of the population of WA was directly employed in mining and 10% in construction.

In 2012 WA contributed 46% of Australia's merchandise exports. This was higher than the share of NSW, Victoria and Queensland combined.

## **Regional Commodity Production (\$million)**

| REGION               | 2011-12 | MAIN COMMODITIES                                |
|----------------------|---------|---|
| Pilbara              | 84,453  | Iron ore 69%, oil & gas 26%                     |
| Goldfields-Esperance | 9,145   | Gold 66%, nickel 31%                            |
| Peel                 | 5,229   | Alumina (76%)                                   |
| Wheatbelt            | 2,671   | Iron ore (50%)                                  |
| Mid West             | 2,405   | Gold, 35%, iron ore 25%                         |
| Kimberley            | 1,380   | Iron ore 54%, diamonds/oil 25%                  |
| South West           | 596     | Coal 49%, mineral sands 31%                     |
| Gascoyne             | 124     | Salt & gems 99%                                 |
| Perth                | 36      | Construction materials, silica & limestone sand |
|                      |         | 100%  |
| Great Southern       | 6       | Spongelite, silica and limestone sand 100%      |



# Mineral Resources – Teacher Background

Data on the previous page is extracted from Department of State Development, Western Australia economic profile Feb. 2013. The document contains more information and can be downloaded from <a href="http://www.dsd.wa.gov.au/documents/000959.mike.thomas.pdf">http://www.dsd.wa.gov.au/documents/000959.mike.thomas.pdf</a>

Generally people classify minerals into rock forming minerals and ores. Ores are minerals which can be mined for profit but are a very small percentage of minerals on Earth.

Students could be asked to report on the major mineral resources of three regions of WA (excepting Peel and Perth)

