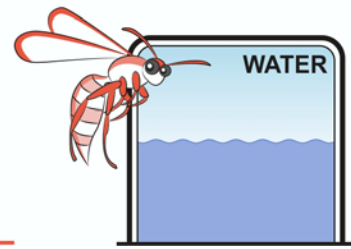


## Drinking Water – Student Activity



China is a vast country. It also has to be careful with its water usage. In the north, far from any large rivers, people were drawing on underground water supplies much faster than the aquifers could be replenished by rain. There is, however, plenty of fresh water rivers in the south of China, so the government planned a huge, multi-decade project to build three different pathways for transporting water from the Yangtze River in the south to the northern cities. The eastern pathway is 1,200km long, and is a series of canals, tunnels and pumping stations. The middle pathway involved raising the height of a major dam to provide gravity feed for a series of aqueducts and tunnels. The western pathway will go through the mountains. The cost will be over \$62 billion and it is projected to be completed by 2050.

Western Australia already completed a similar (though smaller-scale) project to transport drinking water to areas that experienced shortages. In particular, the Goldfields far inland needed more reliable sources of water. During the gold rush, water in Kalgoorlie either came from Perth via horseback or camelback, or produced by time-consuming evaporating then condensing the salt water from lakes and salty aquifers. This meant that, weight for weight, water cost more than gold in Kalgoorlie during the gold rush!

In 1898, an ambitious Western Australian engineer started an amazing project to bring fresh water to Coolgardie and Kalgoorlie from the Mundaring Weir, a dam in the hills east of Perth.

Conduct some research to answer the following questions.

**1. Who was the engineer?**

---

**2. What distance did the project cover?**

---

**3. Describe the scheme.**

---

---

**4. How long did it take to complete?**

---

**5. Is this project still working efficiently?**

---