



THE GOLDEN CROWN

NAME OF STUDENT / GROUP: _____

The Golden Crown mine is situated on New Zealand's richest goldfield.

1. When was gold first mined at the Golden Crown mine? _____

2. How long was the mine open / when did it close down? _____

The mine averaged 12 ounces of gold per ton of quartz.

That's approximately an \$8,000 value per mine-truck loaded with quartz.

3. what does one ounce look like? Is it as big as your a). head b). hand c).thumb nail

4. How many mine trucks can you find on site? _____

The richest gold find at the Golden Crown mine was found in 2 tons of quartz

5. How many million dollars worth of gold was there? _____

Goldmines operated 24 hours per day, 6 days per week.

Miners worked in shifts underground.

6. How long was a shift? _____

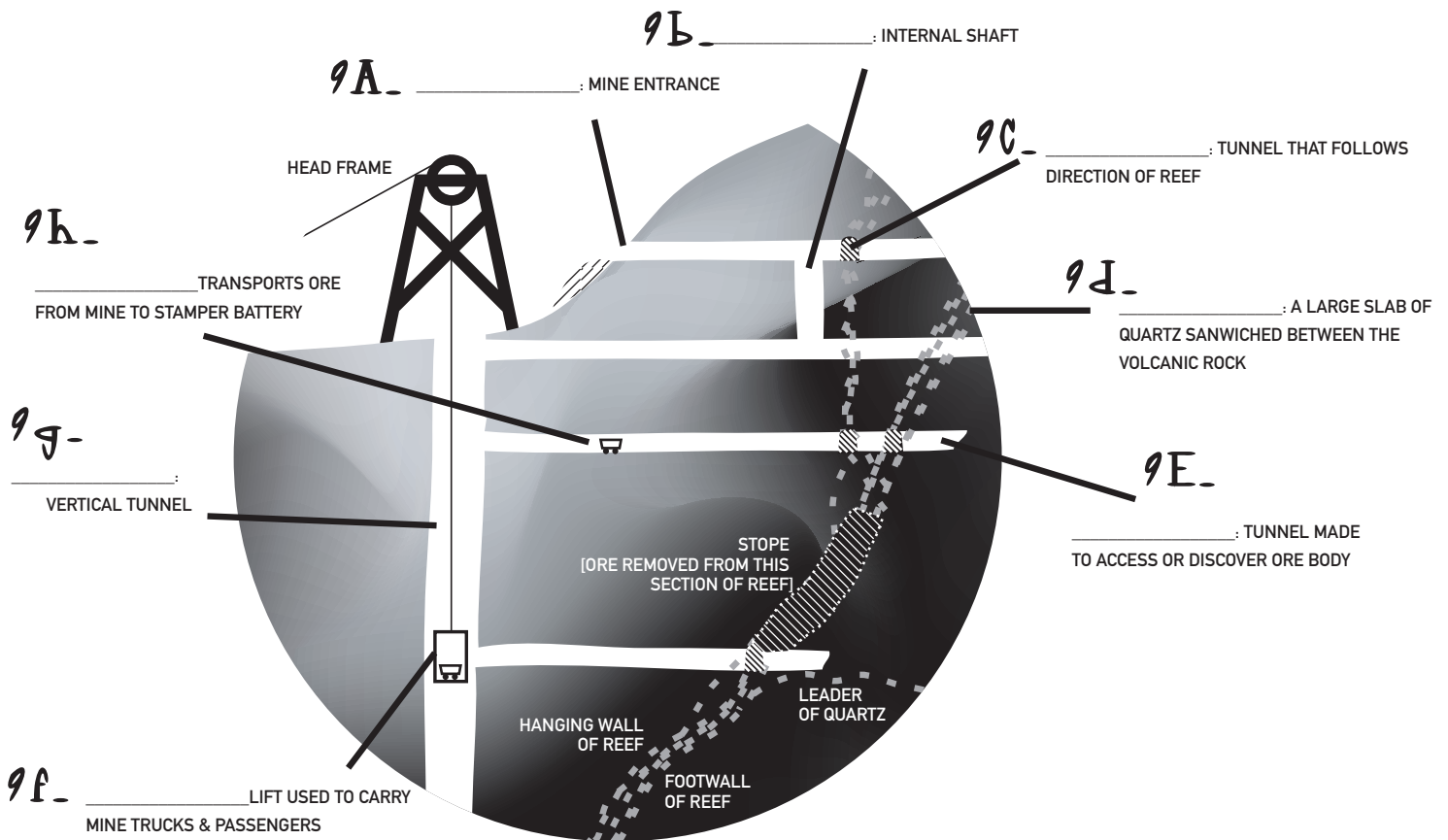
Miners lived to an average age of 35 years old. What dangers did miners encounter underground?

7. Name the 3 most common and potentially lethal dangers of the time. _____
_____, + _____

8. Digging rock is extremely hard work. What tools did the early miners use,

and how far did they progress through the rock in 8 hours? _____

9. Name the parts of a GOLD MINE



Candles supplied light in the mine and warned miners of low oxygen levels.

10. What would happen to the flame of the candle if not enough oxygen was present? _____

Thames looked like Rotorua 2 million years ago.

Geo-thermal activity brought gold and other minerals to the earth's surface.

11. How deep did the miners have to dig to find gold / what was the depth of the Golden Crown Shaft? _____

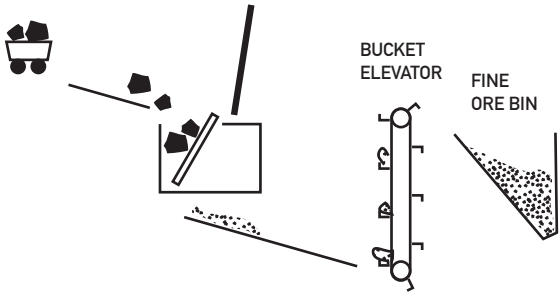
12. What rock is gold found in? _____

13. What is the name of the surrounding volcanic rock? _____

CRUSHING

14A.

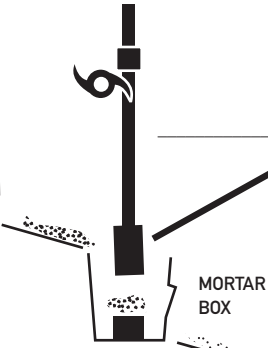
_____ : BREAKS UP ORE



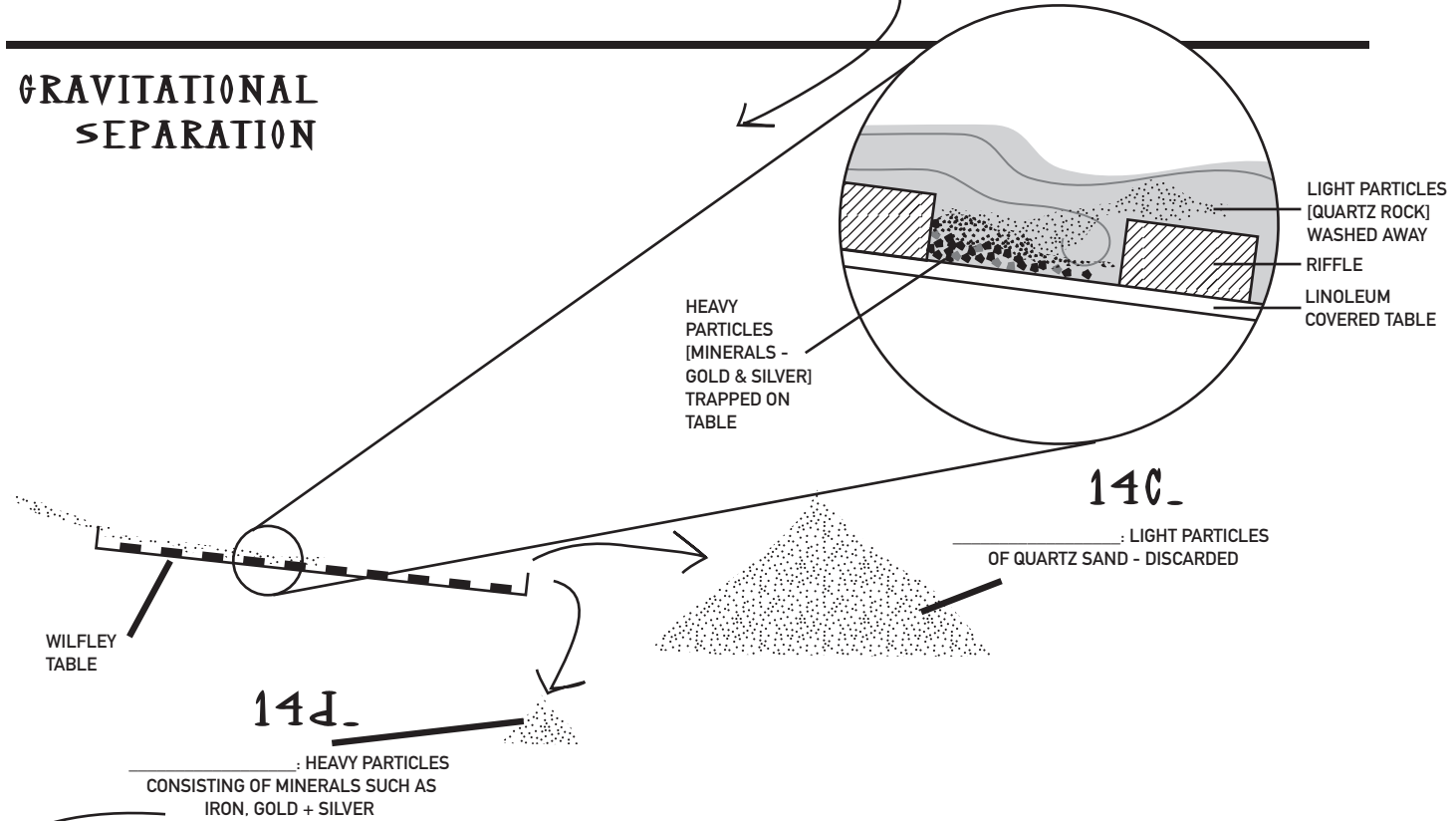
14. NAME THE PARTS OF A Stamper Battery

14B.

_____ : CRUSHES ORE



GRAVITATIONAL SEPARATION



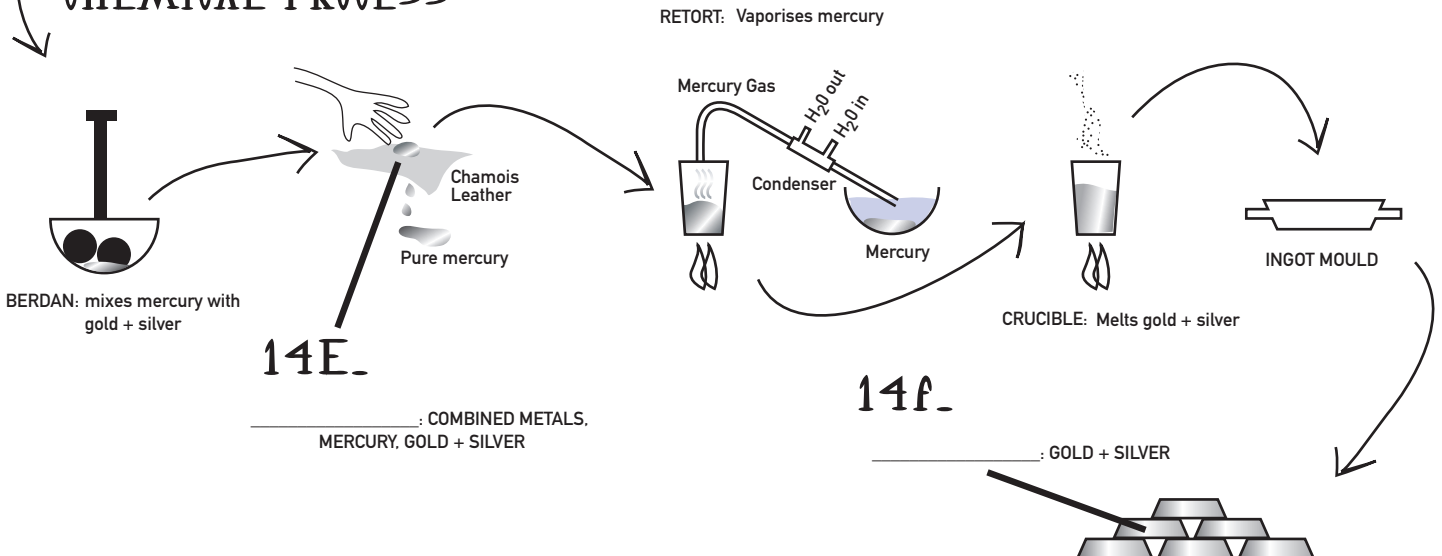
14C.

_____ : LIGHT PARTICLES OF QUARTZ SAND - DISCARDED

14D.

_____ : HEAVY PARTICLES CONSISTING OF MINERALS SUCH AS IRON, GOLD + SILVER

CHEMICAL PROCESS



14E.

_____ : COMBINED METALS. MERCURY, GOLD + SILVER

14F.

_____ : GOLD + SILVER