

All the Gold in the World!

Did you know that all the gold in the world would fit into two Olympic-sized swimming pools? At today's prices (\$950 per troy ounce – 31.1g), that is a total value of a little less than \$5 trillion! The biggest gold producers in the world are South Africa, the USA and Australia.

Gold was one of the first metals discovered by man. As early as 6,000 years ago, gold was hammered into small pieces of jewellery.

Because its supply was limited, it was highly valued and was used as a medium of exchange or money. The first gold coins were minted in Lydia (Turkey) about 560BC.

In the 16th century Spanish conquistadors set out in search of the mythical city of El Dorado – a city of gold, buried in the jungles of South America. It was believed to be ruled by a king who covered his body with a layer of gold dust and bathed in a lake of gold. They never found El Dorado but they plundered and stole gold, silver and precious metals from the native Americans and established large colonies there. However, pirate attacks became very common and the Spaniards often had their 'booty' stolen from them on their journey home.

The discovery of gold in California was the start of the Californian Gold Rush (1848–1855). About 300,000 men, women and children came from all over the US and parts of Europe, Australia, Latin America and Asia. These 'forty-niners' (early gold seekers) travelled in sailing



boats and covered wagons in search of great wealth. Early methods of panning were used to retrieve gold from streams and rivers. Some were lucky but many returned home with little more than they started out with. After the Gold Rush many towns became 'ghost towns'.

Gold can be used in many ways because it has many diverse properties: it conducts electricity, it does not tarnish, it can be drawn into wire, it can be melted and cast and it alloys with many other metals. Today, about 78% of newly mined or recycled gold is used to

make jewellery. It is also used for investments – coins and gold bars. To a lesser extent, gold has more functional uses – in electronics, industrial processes, spacecraft, dentistry and medical devices. A small amount of gold is used in mobile phones, calculators, GPS units, TVs and many other electronic devices.

Because it is resistant to bacteria that may cause infection it is ideal for use in medical implants, e.g. inner ear implants and pacemakers. A person who cannot close their eyes completely suffers from a condition called lagophthalmos. Small implants of gold are put in the upper eyelid, creating a 'weight' which helps the eyelid to close fully.

Gold is held in very high esteem worldwide. In the past it symbolised power, beauty and accomplishment. Today it is used in so many significant objects, e.g. wedding rings, money, Oscars, Grammys, Olympic medals.

For most of us it is a compliment to be told, 'You're worth your weight in gold.' For Ronaldo it is simply an inaccuracy. His transfer from Manchester United to Real Madrid in 2009 cost €94 million. In 24-carat gold, 11.8 stone (74.8kg) Ronaldo would be worth a mere €1.638 million. He is fifty-seven times more expensive in person than his weight in gold!



A

- 1 What is the value of all the gold in the world?
- 2 Where is most of our gold produced?
- 3 Where were the first gold coins minted?
- 4 What is El Dorado?
- 5 What was 'booty'?
- 6 Who were the 'forty-niners'?
- 7 Gold has many **diverse** properties. Explain.
- 8 What percentage of gold is used to make jewellery?
- 9 Why is gold used in medical implants?
- 10 What is gold a symbol of?



There is about fifty cent worth of gold in a mobile phone!

B

- 1 Why, do you think, were 'ghost towns' a feature of California in the mid-19th century?
- 2 What does it mean to be 'worth your weight in gold'?
- 3 What do the following phrases mean?
 - gold-digger
 - all that glitters is not gold
 - golden girl
 - gold is the root of all evil
 - as good as gold
 - a golden opportunity
 - a golden voice



If dentists used iron for fillings there would be a lot of rusty smiles! Gold alloys are used in fillings and crowns because they are non-allergenic and easy to work.

C

Discover your weight in gold!

Find out the current value of gold.

The unit of weight used in dealing with gold is the troy ounce:

1 troy ounce is worth approximately \$950

1kg = 32.15 troy ounces

What is the approximate cost of 1kg of gold?

What is the value of your weight in gold?



Hurricanes

A hurricane is a storm of spiralling wind and rain that usually occurs in the tropical areas of the mid-Atlantic and Pacific oceans, where the water is warm.

Wind occurs when air from an area of high pressure (cool dense air) moves into an area of low pressure (rising warm air). However, if the air moves at speed, for example during a hurricane, it causes extremely strong wind.

Water evaporates from the sea into the warm air above it, which holds the moisture. As the warm air rises, it cools, causing water vapour or droplets to cool and condense, from dark heavy rain clouds. The droplets become heavy and fall from the cloud as rain. These two weather elements constitute the main features of a hurricane storm. Hurricanes usually happen in summer and autumn. Areas most often affected are the USA, Central America, the Caribbean, China, Japan, the China Sea, the western Pacific, the Indian subcontinent and Australia. Hurricanes begin far out in the ocean and gather momentum as they move. Once they reach land, they begin to weaken. However, they are still strong enough to cause extensive damage to trees, buildings and property and even to cause fatalities.



A

- 1 What did the writer wish to explain?
- 2 When does wind occur?
- 3 Write, in your own words, what causes rain.
- 4 According to the writer, what are the two main features of a hurricane?
- 5 Does the writer explain hurricanes effectively? Explain your answer.

B

Select a topic that you have learned about in another area of the curriculum, e.g. science, geography, history.

Use the following headings to help you to plan a piece of writing explaining it.

Title: _____

Subject where you encountered it: _____

Main features/characteristics: _____

Suitable adjectives/words/phrases: _____

Causes: _____

Effects: _____

C

Use your plan in B to write your explanation. Before you begin, bear in mind your intended audience.