**The Miracle of the Miners**

For years, the San-Jose copper-gold mine in northern Chile had been plagued by problems. Shafts and tunnels in the mine collapsed frequently, and eight miners had paid the ultimate price whilst doing their job. The owners of the mine made little improvement to the safety of the mine, so when 33 miners became trapped deep underground in 2010, few people expected them to survive. However, what happened to “Los 33” (The 33) has become one of the most remarkable and miraculous rescue and survival stories in history.

**August 5th 2010:** A team of 33 experienced miners are working 700m below ground and 5km away from the entrance of the mine in the Atacama Desert. Suddenly, they hear a huge rumble from the rear and a cloud of dust engulfs them as part of the mine collapses. The men frantically try to dig away the rubble. It doesn’t take them long to realise that there is no way out – they are trapped.

**August 22nd 2010:** The miners had all but given up hope. Who could possibly rescue them from here? All 33 were still alive, but were weak and hungry – they had survived up to now on handfuls of tuna and a glass of milk each day. Temperatures underground reached a sweltering 33 degrees Celsius. Then, something amazing happened. A tiny drill appeared through the top of the very cavern they were in. The miners were euphoric! They had been found! One miner grabbed a red pen and scribbled a note which he attached to the drill. It read (in Spanish): *“We are well in the shelter, the 33 of us.”*

**August 23rd to 12th October:** The world watched in wonder as pictures of the miners were sent back to the surface using small cameras. Food packages were sent to them down the small bore-holes made by drills. These holes, however, were only a few centimetres across – to actually get the men out would require a much bigger shaft. Wonder turned to frustration as the world’s best mining experts struggled to come up with a rescue plan. After several attempts, and with help from NASA space agency and other corporations from almost every continent, a shaft reached the men that was wide enough to bring them to the surface.

**October 13th 2010:** A capsule was lowered into the chamber that had been the men’s home for more than two months. Then, one by one they were winched to the top. A global TV audience of over a billion people watched the rescue live. Last of all, the leader of the trapped miners, Luis Urzua, was winched to freedom. Draped in a Chilean flag, he punched the air as he stepped from the capsule to be greeted by his nation’s president. This bold and daring rescue was complete.

 **Five facts about the rescue of the miners**

1. The miners survived for more than double the time that anyone else has survived a mining disaster.
2. A small TV was installed in the mine to keep spirits up. The miners enjoyed watching films starring the comic actor, Jim Carrey.
3. Miner Ariel Ticona’s wife gave birth to a daughter on September 14th. She called her daughter Esperanza, the Spanish word for “hope”.
4. Despite their ordeal, only two of the men stayed in hospital for more than 48 hours. They were released a week after the rescue.
5. A major film called “The 33” has been made to tell the tale of the Chilean miners. Antonio Banderas plays the starring role.

***Questions – The Miracle of the Miners***

1) What is the ultimate price that eight miners paid whilst doing their job? (1)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Why might the owners make no improvements to the safety of the mine? (1)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) Why was it no surprise that 33 miners became trapped in August 2010? (2)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) The mine was in a desert. What conditions may have made it difficult for the miners to be rescued? (2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) What effects on the body would the temperature in the mine have on the miners? (2)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6) What evidence is there in the text to show that this operation was on a global scale? (3)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) For how many days were the men trapped underground? (1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) What language is spoken in Chile? (1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) Why might Jim Carrey films have been good choices for the miners to watch? (2)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) Why might Luis Urzua have draped himself in a national flag on his return to the top? (1)
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11) Why might Ariel Ticona’s escape from the mine have been extra special? (1)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12) Why do you think the Ariel Ticona’s child was called Hope? (1)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CHALLENGE: Write a short diary extract of Luis Urzua’s last day in the mine. Continue on a separate page.

***Answers – The Miracle of the Miners***

1) What is the ultimate price that eight miners paid whilst doing their job? (1)

*They died.*

2) Why might the owners make no improvements to the safety of the mine? (1)

*Provide marks for answers that refer to money: Either because they didn’t have the money to make the improvements, or they put their own profits before the safety of the miners.*

3) Why was it no surprise that 33 miners became trapped in August 2010? (2)

*The mine had a history of accidents, and the owners had not invested in making improvements.*

4) The mine was in a desert. What conditions may have made it difficult for the miners to be rescued? (2)
 *Provide marks that refer to remote location (1) and inhospitable conditions, such as hot and dry. (1)*

5) What effects on the body would the temperature in the mine have on the miners? (2)

*Provide marks that refer to excess sweating and dehydration through lack of fluids. Also provide a mark for weight loss.*

6) What evidence is there in the text to show that this operation involved people all over the world? (3)

*The world watched in wonder as pictures of the men were sent from the mine.
NASA and corporations from almost every continent were involved in the rescue.
Almost a billion people watched the rescue live on TV.*

7) For how many days were the men trapped underground? (1) *69.*

8) What language is spoken in Chile? (1) *Spanish.*

9) Why might Jim Carrey films have been good choices for the miners to watch? (2)

*Provide marks for answers that relate to raising the spirits of the miners (1); and helping to take their minds off the situation (1).*

10) Why might Luis Urzua have draped himself in a national flag on his return to the top? (1)

*Provide marks for answers that refer to national pride; an awareness that his nation was in the global spotlight; or that the rescue was a great victory for Chile.*

11) Why might Ariel Ticona’s escape from the mine have been extra special? (1)

*Because his wife gave birth whilst he was in the mine.*

12) Why do you think the Ariel Ticona’s child was called Hope? (1)

*Provide answers that refer to the baby being born whilst Ticona was trapped in the mine. The name suggests the hope that he may come out alive.*