

Letters and the Lamp

Davy's work on the lamp

Answers

1. Where did Davy visit before he set to work on inventing his safety lamp?

Wallsend Colliery, in the north-east of England.

2. What was the name of the gas Davy experimented on when he went back to the Royal Institution?

Fire-damp (mainly composed of methane).

3. Which of these statements are true? Underline three answers: a safety lamp makes it easier for the miners to see in the dark; a safety lamp makes mining more dangerous; a safety lamp causes less explosions than a candle would; a safety lamp makes it more difficult for miners to see in the dark; a safety lamp makes mining safer; a safety lamp causes more explosions than a candle would.

4. When did Davy first describe his ideas for his safety lamp? When did he improve his design?

He first described them in a letter to Hodgson dated 30 October 1815. He improved his design (by incorporating wire gauze) in mid- to late December 1815.

5. What did the mine owners think of Davy?

They said Davy had shown 'brilliant genius' in inventing his lamp. The mine owners also said that Davy had their 'profound respect and high admiration'.