Children's learning activities from the Peak District Mining Museum.

What did a miner need to have so he could do his job?

Use these words to fill in the blanks below:

canary, candles, shovel, pickaxe, helmet, gunpowder, ladder, tub, bucket.

A Derbyshire lead miner would use _____ to help him light up the mine, he would often make these from animal fat and they would smell horrible. Each time he went into the mine he would take spare candles. On his head he would wear a _____ called a bradder hat which was made of leather.

The miner's tools included a _____ to break up the rock, a _____ to put the bits of rock into a wooden_____. Sometimes he would put the rock into a _____which was on rails and could be pushed out of the mine. To get into the mine they would often have to climb down _____.

In the bigger mines they would use explosives including _____, this could be dangerous as any sparks could make it explode before it was meant to!

A few of the lead mines had problems with gases that could kill the miners. They would take a _____ in a cage into the mine, the gas would make the bird collapse before it affected the miners so they would know to leave the mine.

Most of the miners were men but there were a few women miners. Lead mines did not often have children working underground unlike the coal mines.

Look at this picture of a miner with his pickaxe over his shoulder, his candles around his neck, his water bottle and his clay pipe in his pocket.

Can you draw a picture of a miner?

We would love to see it! You can photograph or scan it and send it to our Facebook page - www.facebook.com/peakmines

PEAK DISTRICT LEAD MINING MUSEUM

Children's learning activities from the Peak District Mining Museum.

Mining Maths!

Miners had to make sure they had enough candles for their shift in the mine (the time they were working under-ground). A candle might last for **1 hour**.

If the miner was working for **8 hours** how many candles would he need? _____

Longer candles might last for **1½ hours**.

How many of the longer candles would you need for an **8 hour** shift? _____

How long would it take a miner to dig a sough?

Soughs are special tunnels dug to take water from the mine down to a river. This means that the miners can dig deeper and deeper into the ground to find the lead ore. But it is hard work digging through rock and takes a long time.

The miners would start at the river end and dig a narrow tunnel, just wide enough for them to fit through and high enough to stand up. This shape of tunnel is called a coffin level because of its shape. They would work with a hammer and chisel and in one day's work they would only get 5cm closer to the mine!

So in 1 day they would get 5cm closer.

How far would they get in 10 days?_____

How many days would it take to dig 1 metre (100cm)?

_____

Some of these soughs were 2000m or 4000m long.

Work out how many days it would take to dig 2000m. _____

This is a coffin level - it has all been dug out by hand.

PEAK DISTRICT LEAD MINING MUSEUM

Peak District Mining Museum Wordsearch!

O	E	K	I	B	B	L	E	A	D	R
A	R	T	M	D	H	C	N	D	E	W
M	K	E	X	P	L	O	S	I	V	E
I	I	L	B	Q	G	N	O	T	P	R
N	N	N	H	A	M	M	E	R	I	E
E	G	B	G	T	R	H	A	G	I	P
R	X	A	M	O	I	R	L	A	K	I
L	E	T	M	G	T	F	O	D	Y	C
O	M	E	A	D	I	O	N	W	X	K
T	E	X	P	C	A	N	A	R	Y	Q

Words To Find:

1. Miner
2. Ore
3. Adit
4. Kibble
5. Pick
6. Gad
7. Pig
8. Ingot
9. Lead
10. Bat
11. Barrow
12. Hammer
13. Explosive
14. Canary

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Match the word with the image!

Helmet

Explosive

Lamp

Bat

Candle

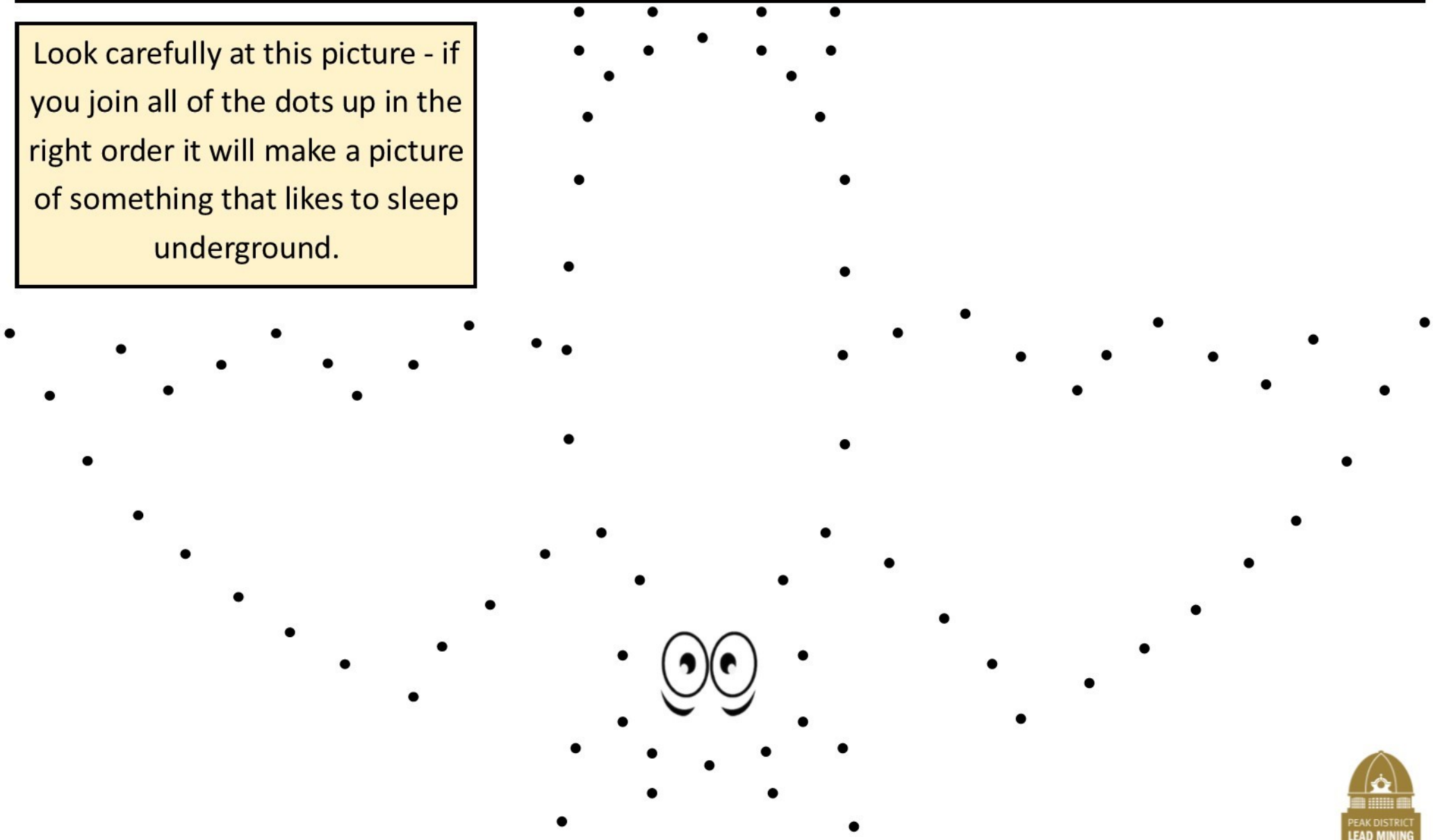
Hammer

Pickaxe

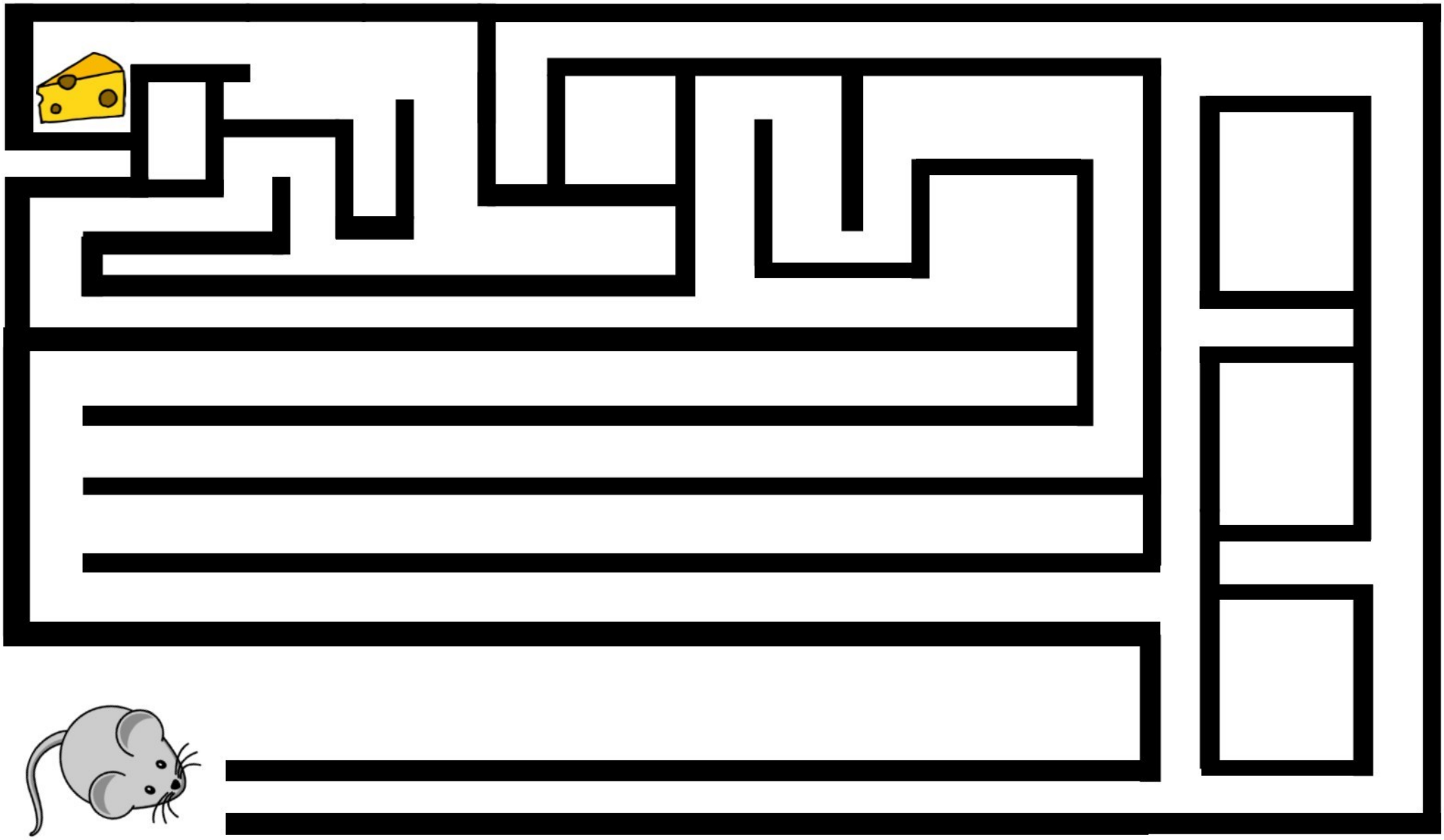
Canary

Peak District Mining Museum Connect The Dots

Look carefully at this picture - if you join all of the dots up in the right order it will make a picture of something that likes to sleep underground.



PEAK DISTRICT LEAD MINING MUSEUM



Peak District Mining Museum Maze!

Can you help Temple Mouse find a way through the maze to get to his cheese?

PEAK DISTRICT LEAD MINING MUSEUM

Peak District Mining Museum Wordsearch
Word Meanings

Miner - A person who works in a mine.

Lead - A heavy bluish-grey metal found underground.

Ore - The rock from which a metal or other valuable mineral can be extracted.

Bat - A mainly nocturnal mammal that sometimes can be found sleeping in mines.

Adit - A level passage leading into a mine for the purposes of access (like Temple Mine's entrance).

Kibble - An iron hoisting bucket used in mines.

Barrow - A one or two-wheeled handcart.

Pick - A tool used by miners also known as a pick axe.

Hammer - Another tool used by miners to break-up rock.

Gad - A small tool used with a hammer to break up rock.

Explosive - From the 1660s Derbyshire lead miners sometimes used gun power to blast the rock underground.

Pig - Newly smelted lead is made into ingots also known as 'pigs' - so called because the arrangement looks like the sow feeding her piglets.

Canary - A bird that was sometimes bought underground to check for gas.

Ingot - another word for pig; a bar of newly smelted lead.

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