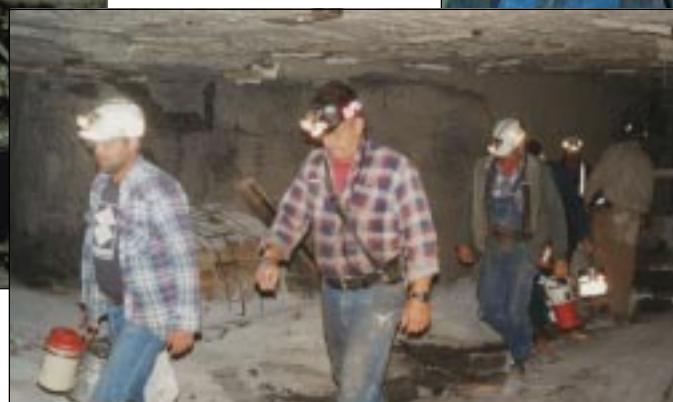
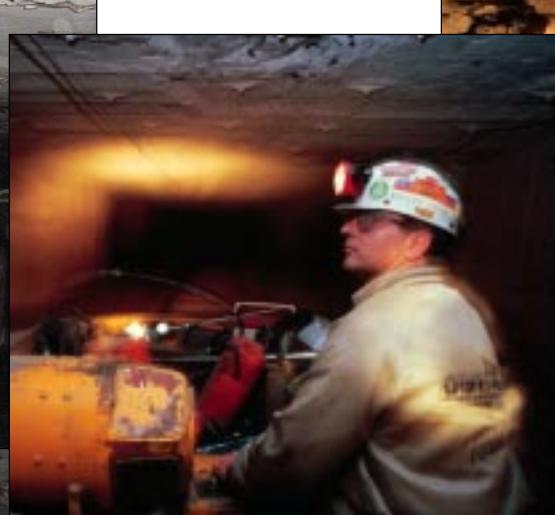


What do all of these people have in common?

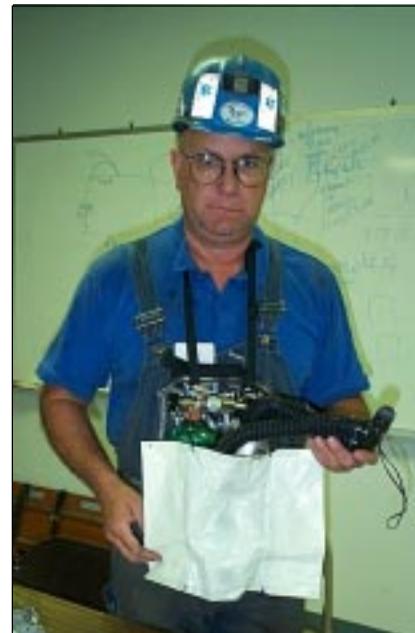


They are **coal miners**. The people that dig coal from the earth are called **coal miners**.

Since safety is very important to mining, miners wear and carry several items to help keep them safe.



All miners wear hardhats to protect their head. A battery-powered **cap lamp** attaches to the hat and provides light underground.



A **self-rescuer**, or gas mask, is carried on the miner's belt. The self-rescuer changes carbon

monoxide to carbon dioxide for miners to breath during emergencies. Larger Self-Contained Self-Rescuers (SCSR) (at right) are located in the underground mining units. SCSR contain small bottles of oxygen.



Some coal miners wear elastic ankle straps to keep their pant legs from being caught in machinery, which helps to protect their legs. Safety glasses are worn for eye protection. Steel-toed boots are worn to protect their feet from falling rocks, coal and other heavy objects.

Reflective tape on hardhats and clothing makes the miners more visible underground.



Can you find all of the safety equipment on these coal miners?





Large fans inside these structures pull air through the mine.



Underground mines use special air systems to channel fresh air through the mines. Large fans pull fresh air down the **intake air shaft**.

Air locks, block walls and curtains direct the flow of air through the main tunnels of the mine. Air exits the mine through a **return air shaft**.



Mine curtains and block walls help keep the air flowing through the mine in the right direction.

Underground the air is checked regularly for volume and quality. Fresh air is important for the miners' safety.



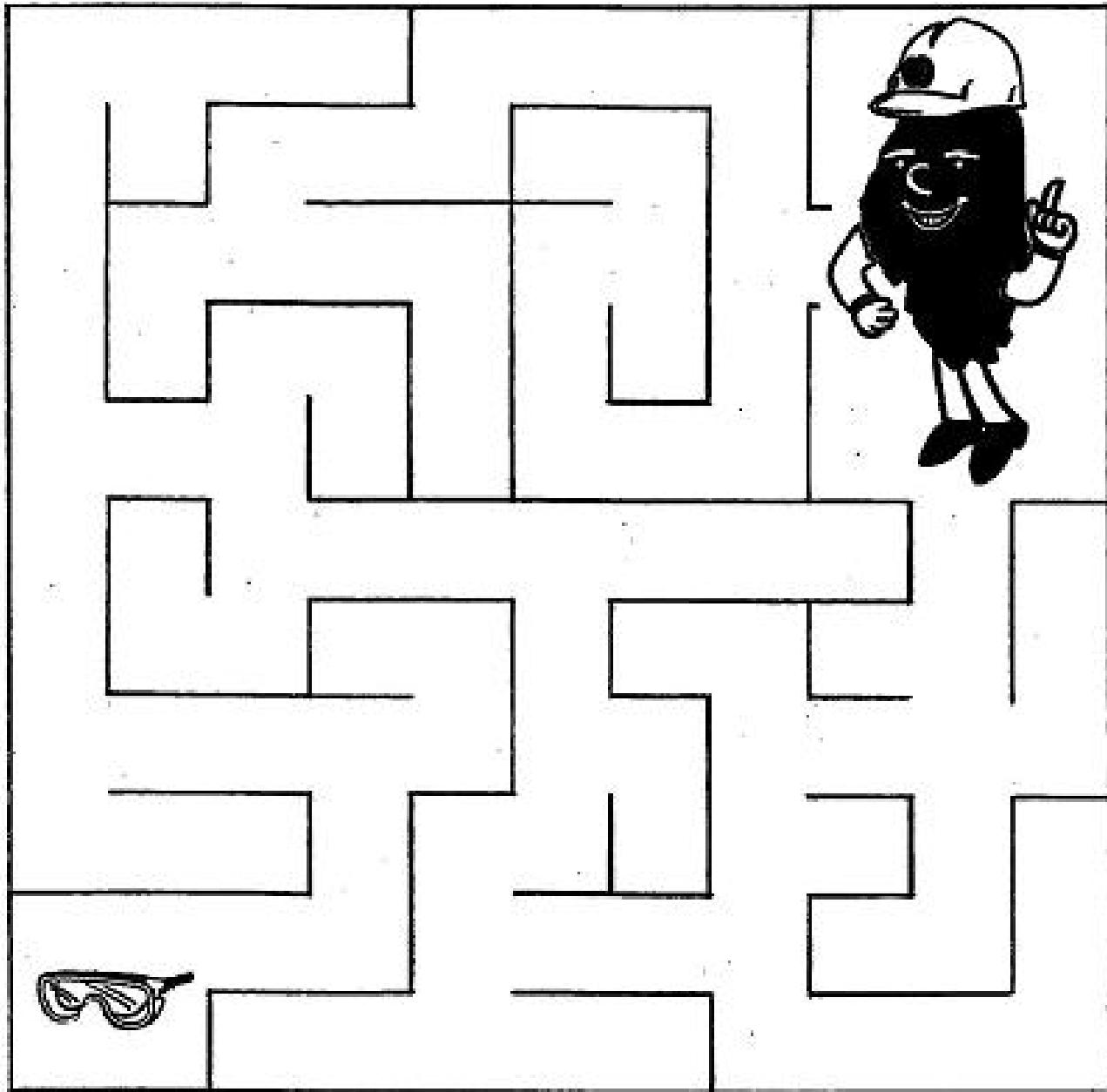
Miners use special instruments to check the quality (methane detector) and volume of air (anemometers) flowing through the mine.



An A-Maze-In Search Puzzle

Mr. Alumpa Coal's Safety Search

Directions: Can you help Mr. Alumpa Coal find his safety glasses?



A Code Word Puzzle

Coal Code Detection

DIRECTIONS: Be a code detective and search for the coal fact. Use the code and then write the coal fact on the lines.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
U	M	O	A	D	L	R	B	X	F	Q	C	I	J	T	G	V	W	K	E	N	S	P	Z	H	Y

15	3	----	7	20	4	12	25	----	12	3	4	6	----

5	20	20	23	----	1	21	5	20	7	----	15	25	20

16	7	3	1	21	5	----	2	13	21	20	7	22	----

3	10	15	20	21	----	25	4	17	20	----	15	3	----

5	7	13	6	6	----	15	25	7	3	1	16	25	----

22	4	21	5	22	15	3	21	20	----	22	25	4	6

20	----	4	21	5	----	6	13	2	20	22	15	3	21

20
