KS3 SCIENCE · CHEMISTRY

The periodic table

Word search

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

Find these 10 words

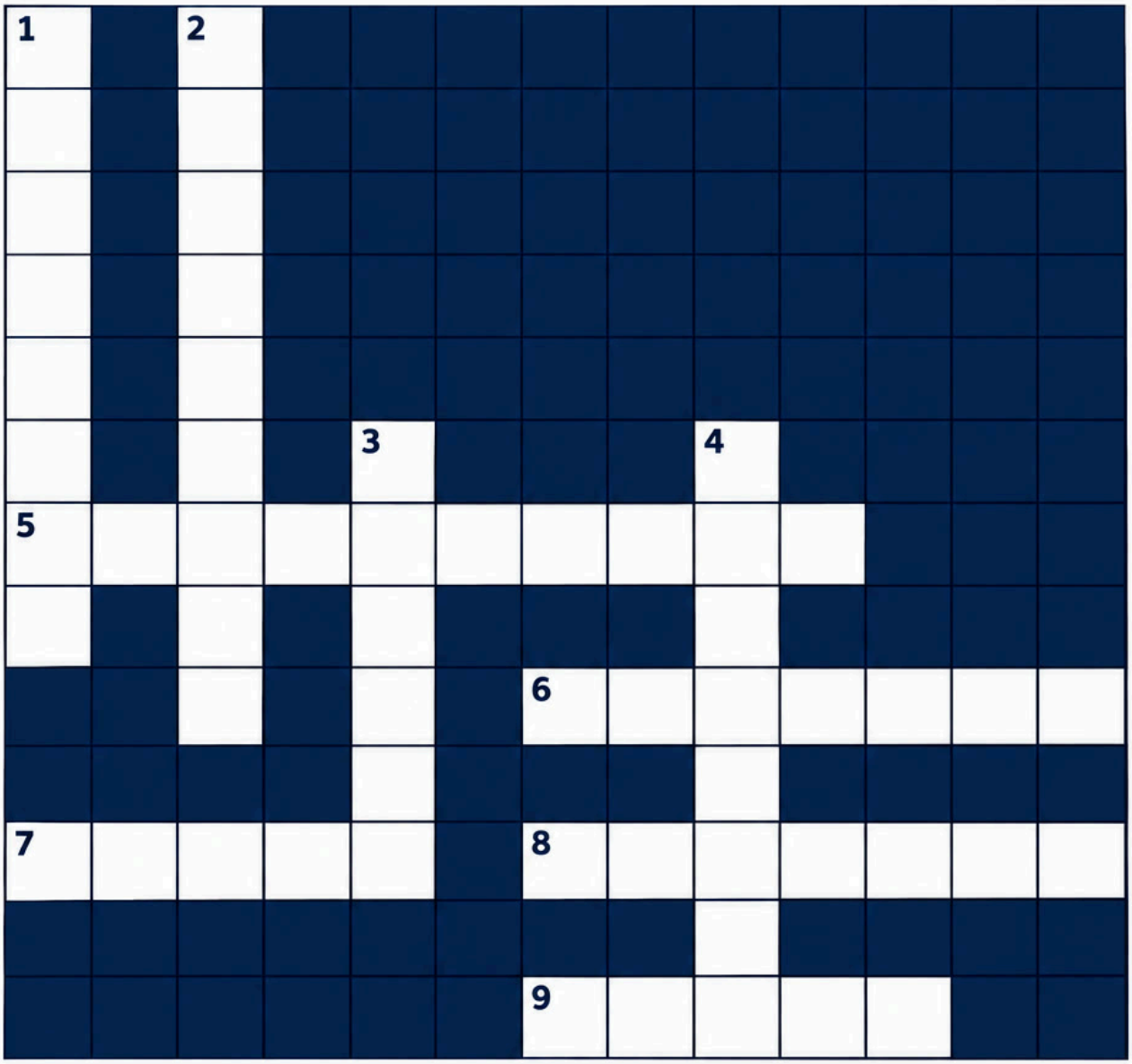
- ☐ ATOMIC NUMBER
- ☐ BRITTLE
- ☐ CONDUCTOR
- ☐ DUCTILE
- ☐ GROUP
- ☐ HALOGENS
- ☐ MALLEABLE
- ☐ METAL
- ☐ PERIOD
- ☐ TREND

Words go across, down or diagonally. Spaces are left out.

KS3 SCIENCE · CHEMISTRY

The periodic table

Crossword



Across

5 The unreactive gases in Group 0 (5,5)

6 Can be pulled out into a wire (7)

7 A pattern in a property as you go down a group or across a period (5)

8 Shatters when it is hit (7)

9 Unreactive: it hardly ever takes part in a reaction (5)

Down

1 The reactive non-metals in Group 7 (8)

2 Can be hammered into shape without breaking (9)

3 A row of the periodic table (6)

4 Takes part in chemical reactions easily (8)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY

The periodic table

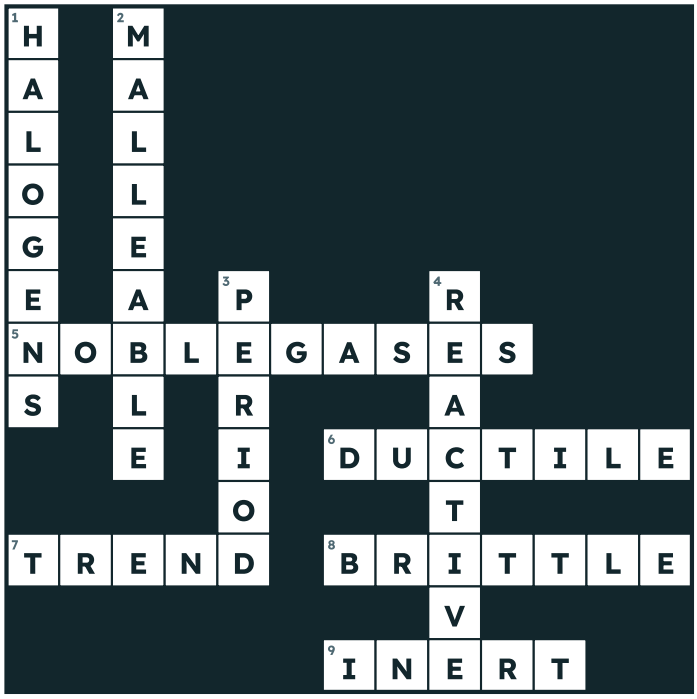
Answers

Word search



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

Crossword



Across

5 Noble gases
The unreactive gases in Group 0 (5,5)

6 Ductile
Can be pulled out into a wire (7)

7 Trend
A pattern in a property as you go down a group or across a period (5)

8 Brittle
Shatters when it is hit (7)

9 Inert
Unreactive: it hardly ever takes part in a reaction (5)

Down

1 Halogens
The reactive non-metals in Group 7 (8)

2 Malleable
Can be hammered into shape without breaking (9)

3 Period
A row of the periodic table (6)

4 Reactive
Takes part in chemical reactions easily (8)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 1

Metals and non-metals

Word search

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

Find these 8 words

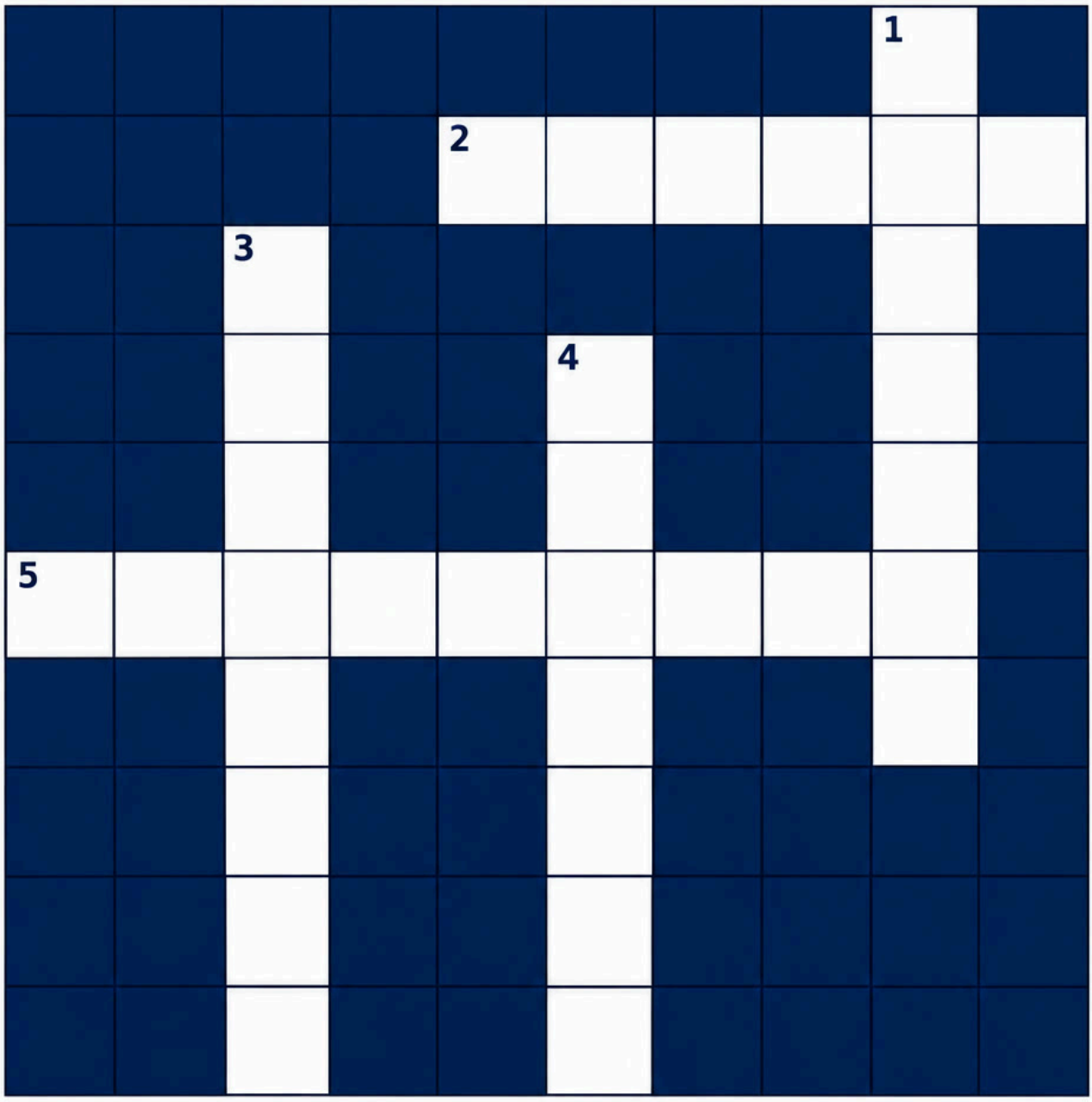
- ☐ ALUMINIUM
- ☐ BRITTLE
- ☐ CONDUCTOR
- ☐ COPPER
- ☐ DUCTILE
- ☐ GRAPHITE
- ☐ MALLEABLE
- ☐ SHINY

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 1

Metals and non-metals

Crossword



Across

2 The metal used for electrical wires and cable (6)

5 Lets electricity and heat pass through it easily, as metals do (9)

Down

1 The metal that is a liquid at room temperature (7)

3 Attracted to a magnet, as iron, nickel and cobalt are (8)

4 Can be pulled into a wire (7)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

Lesson 1: Metals and non-metals

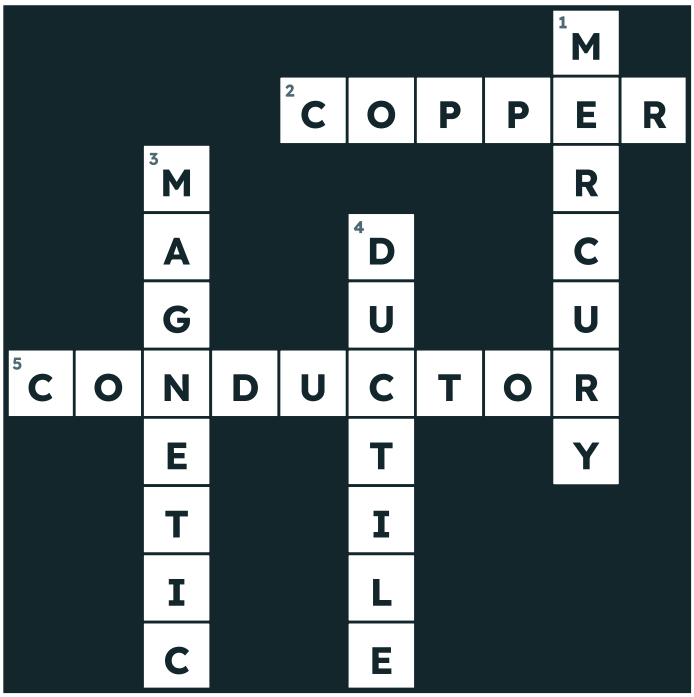
Answers

Word search



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

Crossword



								1 M	
				2 C	O	P	P	E	R
			3 M					R	
			A			4 D		C	
			G			U		U	
5 C	O	N	D	U	C	T	O	R	
			E			T		Y	
			T			I			
			I			L			
			C			E			

Across

2 Copper
The metal used for electrical wires and cable (6)

5 Conductor
Lets electricity and heat pass through it easily, as metals do (9)

Down

1 Mercury
The metal that is a liquid at room temperature (7)

3 Magnetic
Attracted to a magnet, as iron, nickel and cobalt are (8)

4 Ductile
Can be pulled into a wire (7)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 1 page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 2

Organising the elements

Word search

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

Find these 8 words

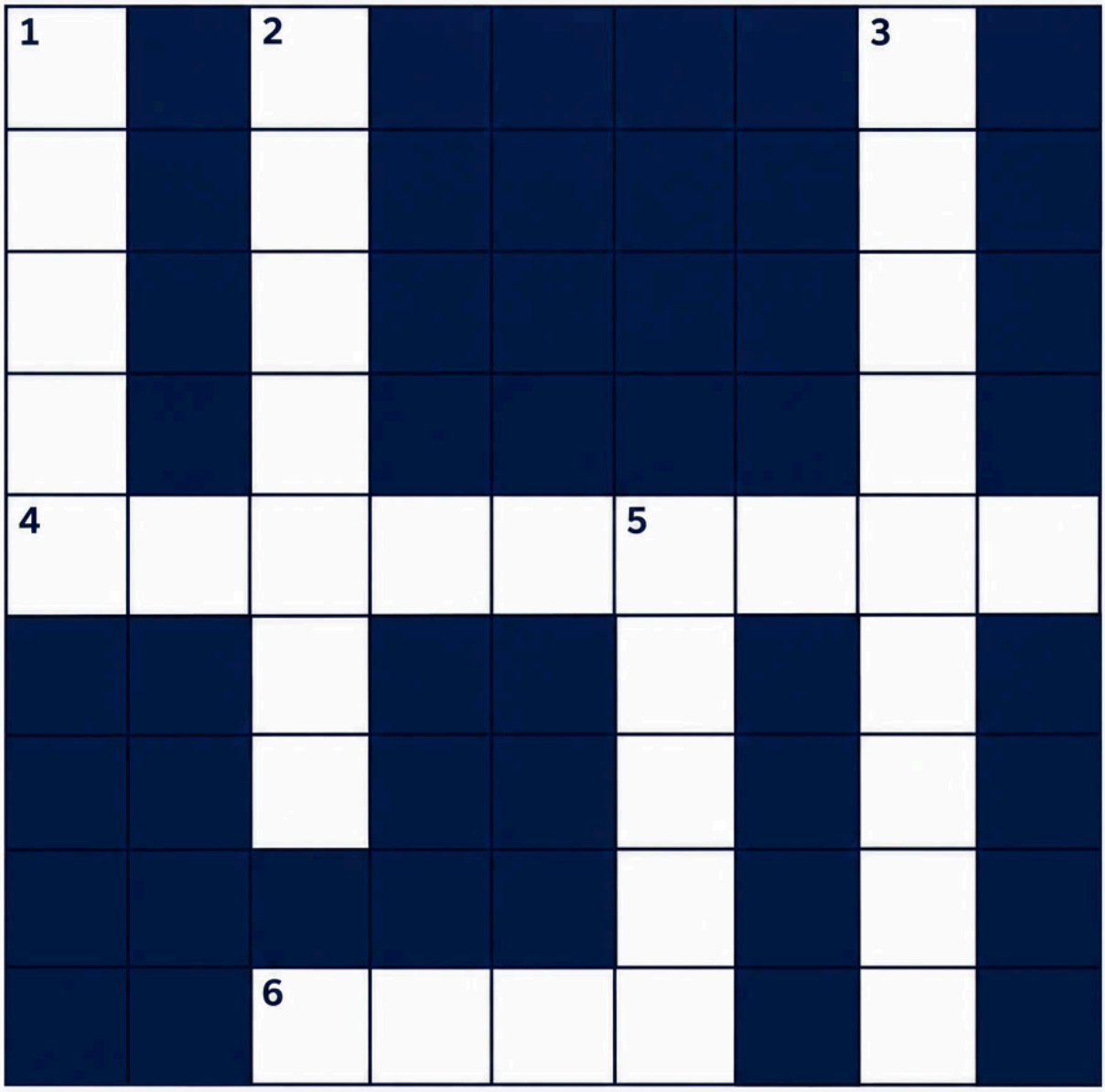
- ☐ ATOMIC NUMBER
- ☐ COLUMN
- ☐ ELEMENT
- ☐ GAPS
- ☐ GROUP
- ☐ MENDELEEV
- ☐ PERIOD
- ☐ PREDICTED

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 2

Organising the elements

Crossword



Across

4 Used the table to say in advance what future discoveries would be like (9)

6 Spaces left in the table for ones nobody had found yet (4)

Down

1 Boxes that behave alike are put in one of these; the main ones are numbered 1 to 7 and 0 (5)

2 Every box in the table is one of these (7)

3 Published his table in 1869 (9)

5 Small pieces of stiff paper used to arrange the 1869 table (5)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

Lesson 2: Organising the elements

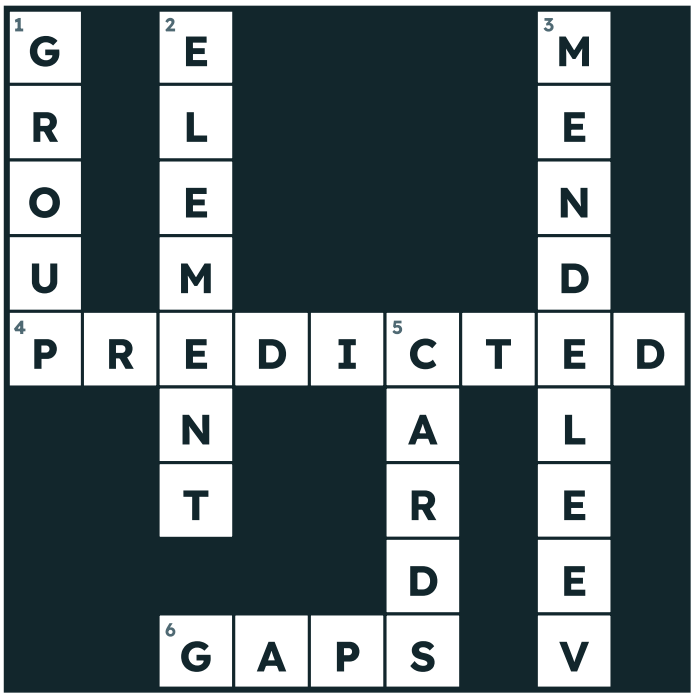
Answers

Word search



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

Crossword



1 G		2 E					3 M	
R		L					E	
O		E					N	
U		M					D	
4 P	R	E	D	I	5 C	T	E	D
		N			A		L	
		T			R		E	
					D		E	
		6 G	A	P	S		V	

Across

4 Predicted
Used the table to say in advance what future discoveries would be like (9)

6 Gaps
Spaces left in the table for ones nobody had found yet (4)

Down

1 Group
Boxes that behave alike are put in one of these; the main ones are numbered 1 to 7 and 0 (5)

2 Element
Every box in the table is one of these (7)

3 Mendeleev
Published his table in 1869 (9)

5 Cards
Small pieces of stiff paper used to arrange the 1869 table (5)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 2 page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 3

Reading the periodic table

Word search

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

Find these 8 words

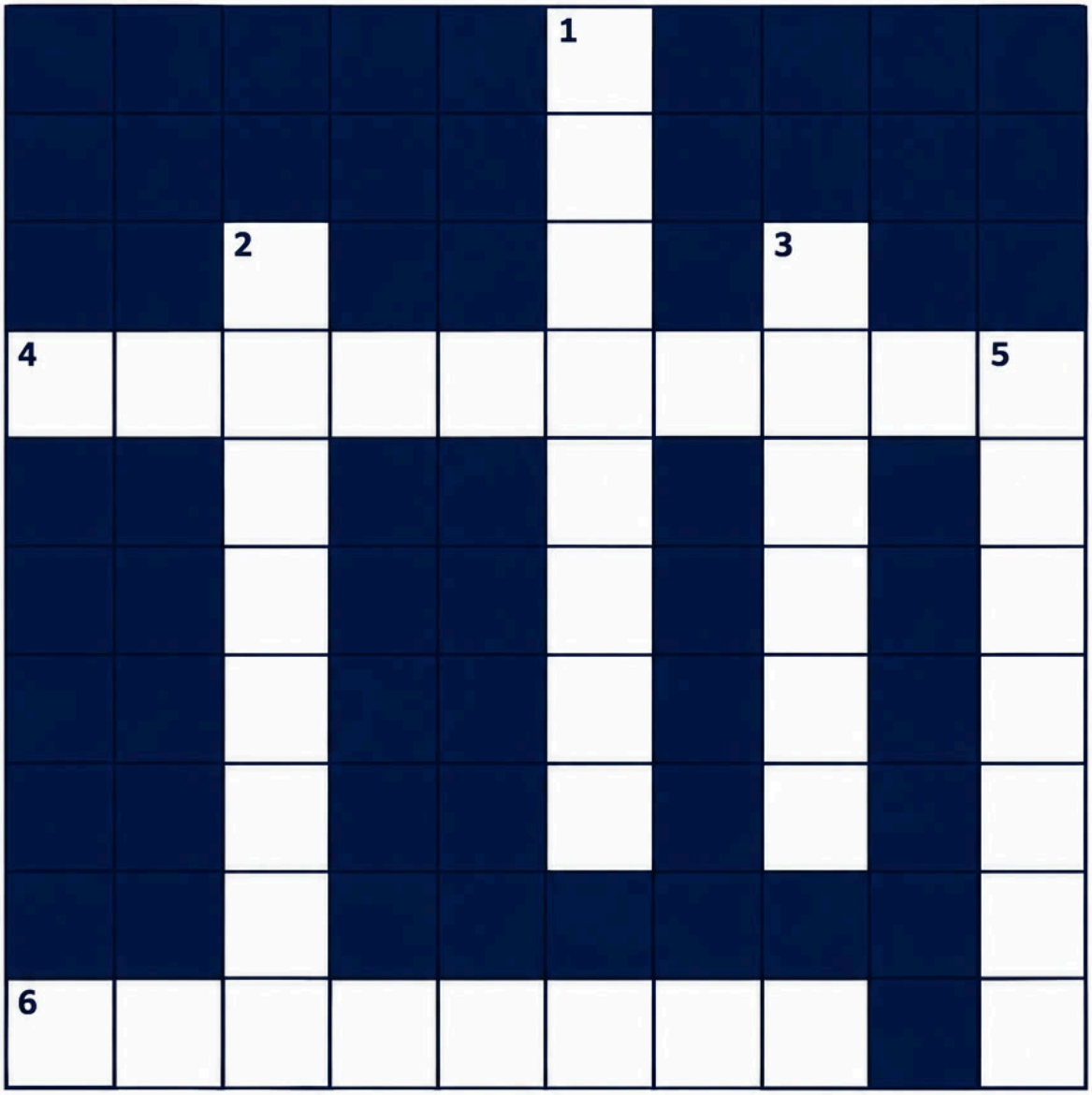
- ☐ ATOMIC NUMBER
- ☐ HELIUM
- ☐ HYDROGEN
- ☐ POSITION
- ☐ PROPERTIES
- ☐ QUARTERS
- ☐ SYMBOL
- ☐ ZIGZAG

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 3

Reading the periodic table

Crossword



Across

4 The science word for features such as being shiny or dull (10)

6 An element that is usually dull and a poor conductor (3,5)

Down

1 About three ___ of the elements are metals (8)

2 Where a box sits in the table is its ___ (8)

3 The shape of the line that divides the two kinds of element (6)

5 Found next to the dividing line, it behaves a bit like both kinds of element (7)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

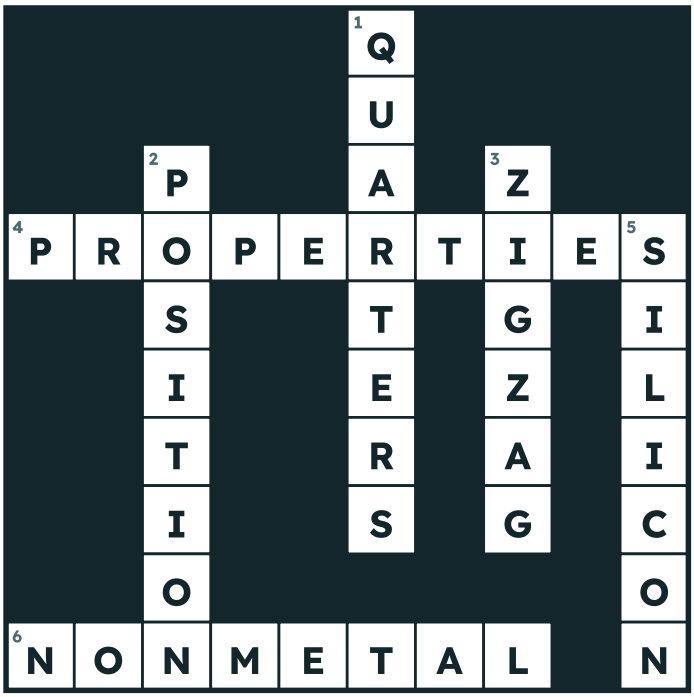
Lesson 3: Reading the periodic table

Answers

Word search

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

Crossword



Across

4 Properties
The science word for features such as being shiny or dull (10)

6 Non-metal
An element that is usually dull and a poor conductor (3,5)

Down

1 Quarters
About three ___ of the elements are metals (8)

2 Position
Where a box sits in the table is its ___ (8)

3 Zigzag
The shape of the line that divides the two kinds of element (6)

5 Silicon
Found next to the dividing line, it behaves a bit like both kinds of element (7)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 3 page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 4

Group 1: the alkali metals

Word search

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

Find these 8 words

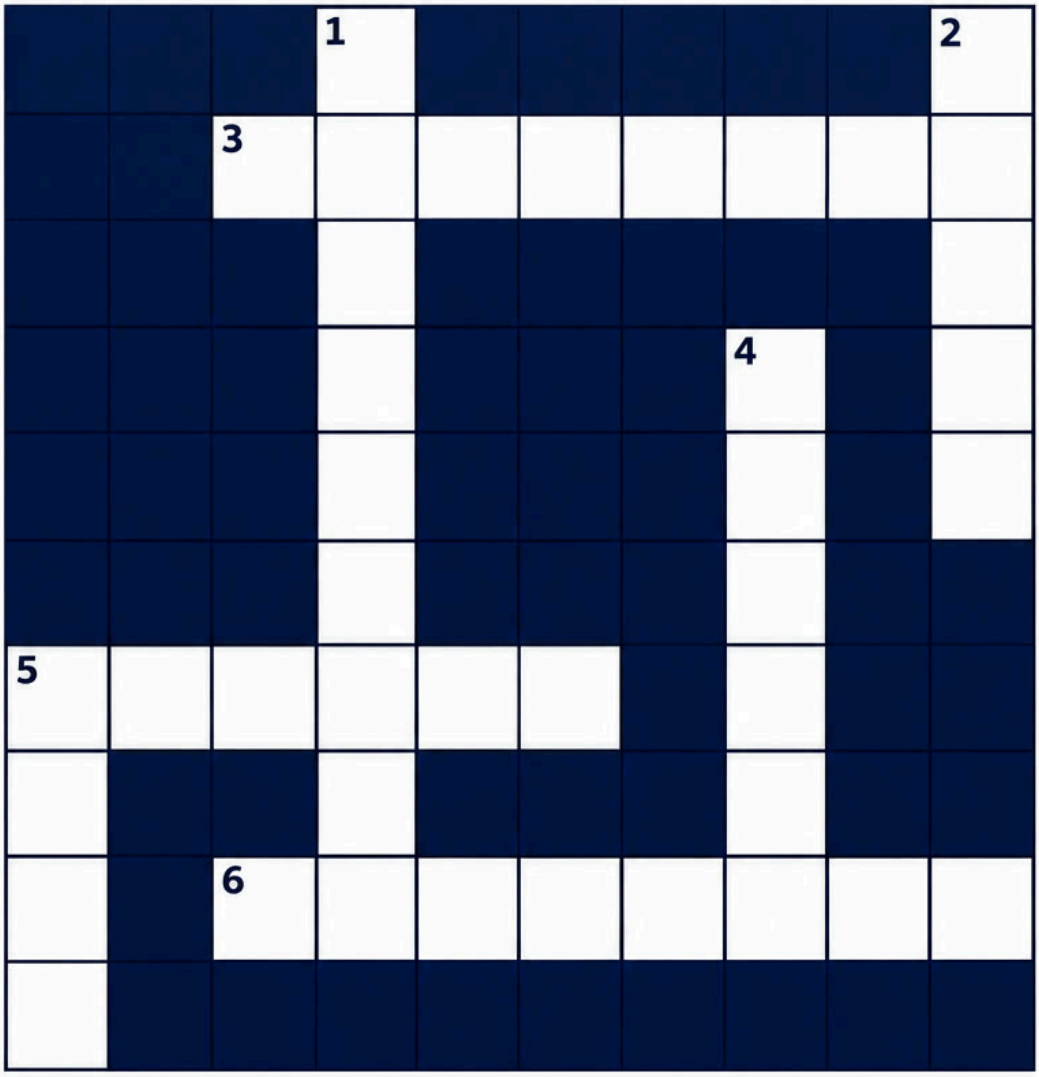
- ☐ ALKALI
- ☐ HYDROGEN
- ☐ HYDROXIDE
- ☐ POTASSIUM
- ☐ REACTIVE
- ☐ SHINY
- ☐ SODIUM
- ☐ SOFT

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 4

Group 1: the alkali metals

Crossword



Across

3 The gas made when a Group 1 metal reacts with water (8)

5 The one in the middle of the list, going down Group 1 (6)

6 Takes part in chemical reactions easily (8)

Down

1 Formed along with a gas when a Group 1 metal reacts with water, and it dissolves (9)

2 A kitchen cutting tool with a handle, used to cut Group 1 metals (5)

4 The Group 1 metals are named after this kind of solution (6)

5 The opposite of hard, describing Group 1 metals (4)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

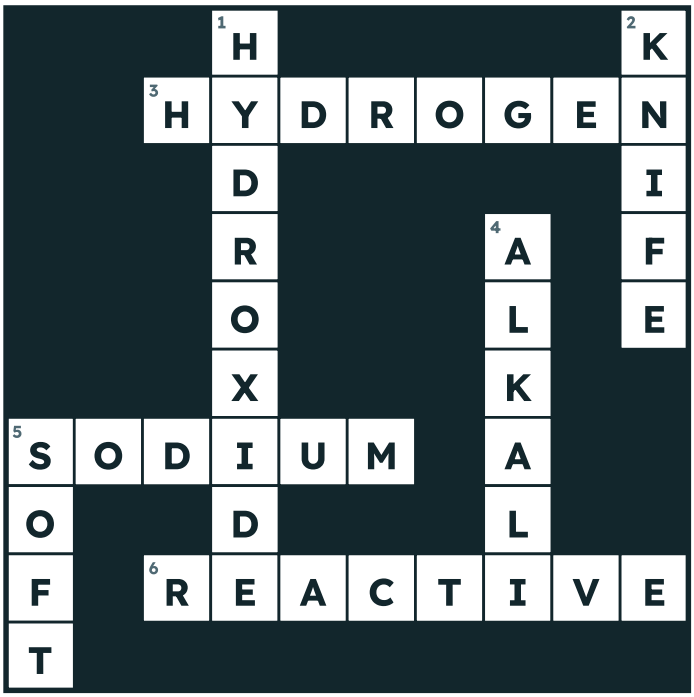
Lesson 4: Group 1: the alkali metals

Answers

Word search



Crossword



Across

3 Hydrogen
The gas made when a Group 1 metal reacts with water (8)

5 Sodium
The one in the middle of the list, going down Group 1 (6)

6 Reactive
Takes part in chemical reactions easily (8)

Down

1 Hydroxide
Formed along with a gas when a Group 1 metal reacts with water, and it dissolves (9)

2 Knife
A kitchen cutting tool with a handle, used to cut Group 1 metals (5)

4 Alkali
The Group 1 metals are named after this kind of solution (6)

5 Soft
The opposite of hard, describing Group 1 metals (4)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 4 page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 5

Group 7 and Group 0

Word search

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

Find these 8 words

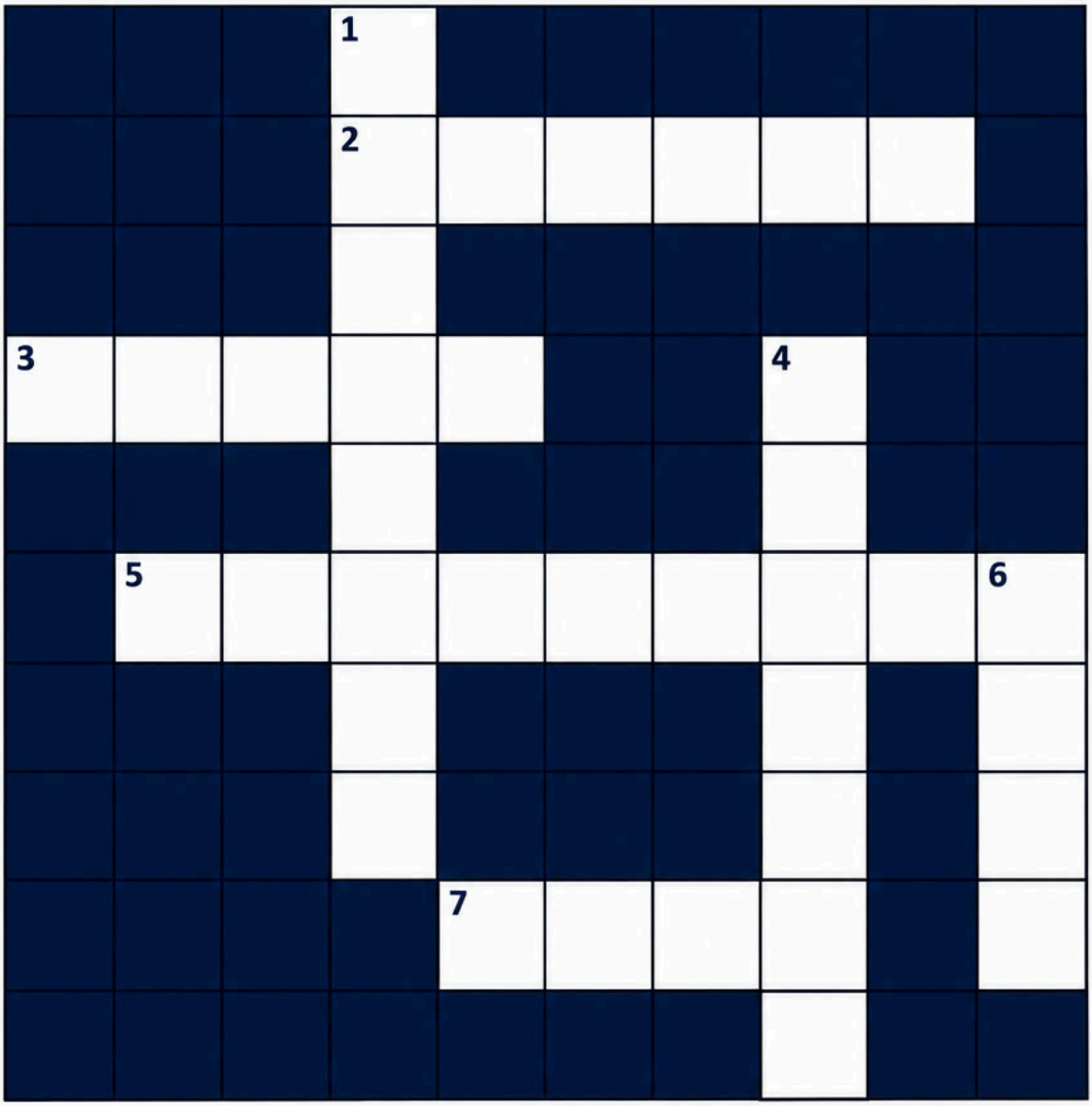
- ☐ ARGON
- ☐ BROMINE
- ☐ CHLORINE
- ☐ HELIUM
- ☐ INERT
- ☐ IODINE
- ☐ POISONOUS
- ☐ SALT

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 5

Group 7 and Group 0

Crossword



Across

2 Used in balloons because it is safe (6)

3 Used to fill light bulbs, and blown over hot metal by welders (5)

5 Toxic, as the Group 7 elements are (9)

7 The second Group 0 element, going down the group (4)

Down

1 A pale yellow-green gas in Group 7 (8)

4 The Group 7 element that is a liquid at room temperature (7)

6 Sodium chloride is also called table ___ (4)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

Lesson 5: Group 7 and Group 0

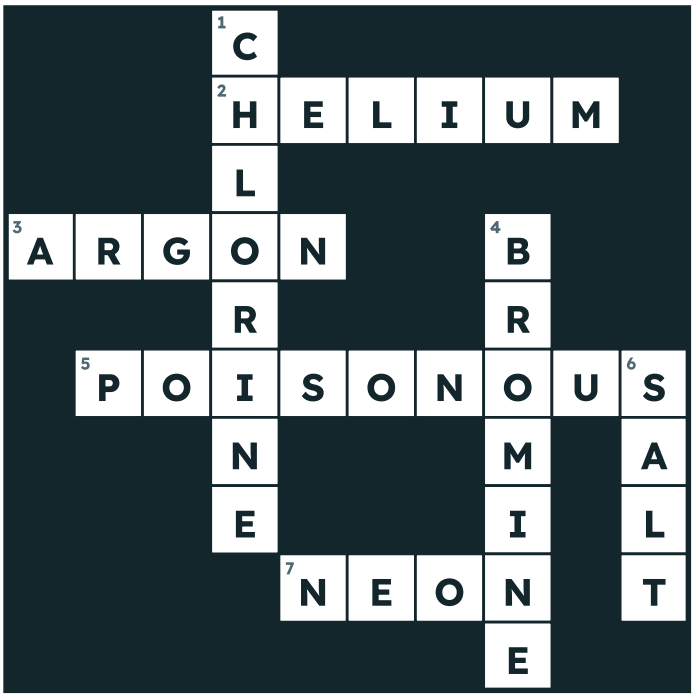
Answers

Word search



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

Crossword



Across

2 Helium
Used in balloons because it is safe (6)

3 Argon
Used to fill light bulbs, and blown over hot metal by welders (5)

5 Poisonous
Toxic, as the Group 7 elements are (9)

7 Neon
The second Group 0 element, going down the group (4)

Down

1 Chlorine
A pale yellow-green gas in Group 7 (8)

4 Bromine
The Group 7 element that is a liquid at room temperature (7)

6 Salt
Sodium chloride is also called table ___ (4)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 5 page of the KS3 Science revision site.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 6

Predicting from patterns

Word search

C	V	P	A	T	T	E	R	N	A
C	C	A	E	S	I	U	M	A	S
E	N	R	B	O	I	L	I	N	G
M	S	P	B	R	O	M	I	N	E
U	I	T	R	T	R	E	N	D	O
N	E	S	I	E	B	S	E	L	A
W	G	L	S	M	D	D	A	H	S
W	P	R	Y	I	A	I	N	P	W
Y	T	E	A	S	N	T	C	W	L
A	W	D	P	M	I	G	E	T	O

Find these 8 words

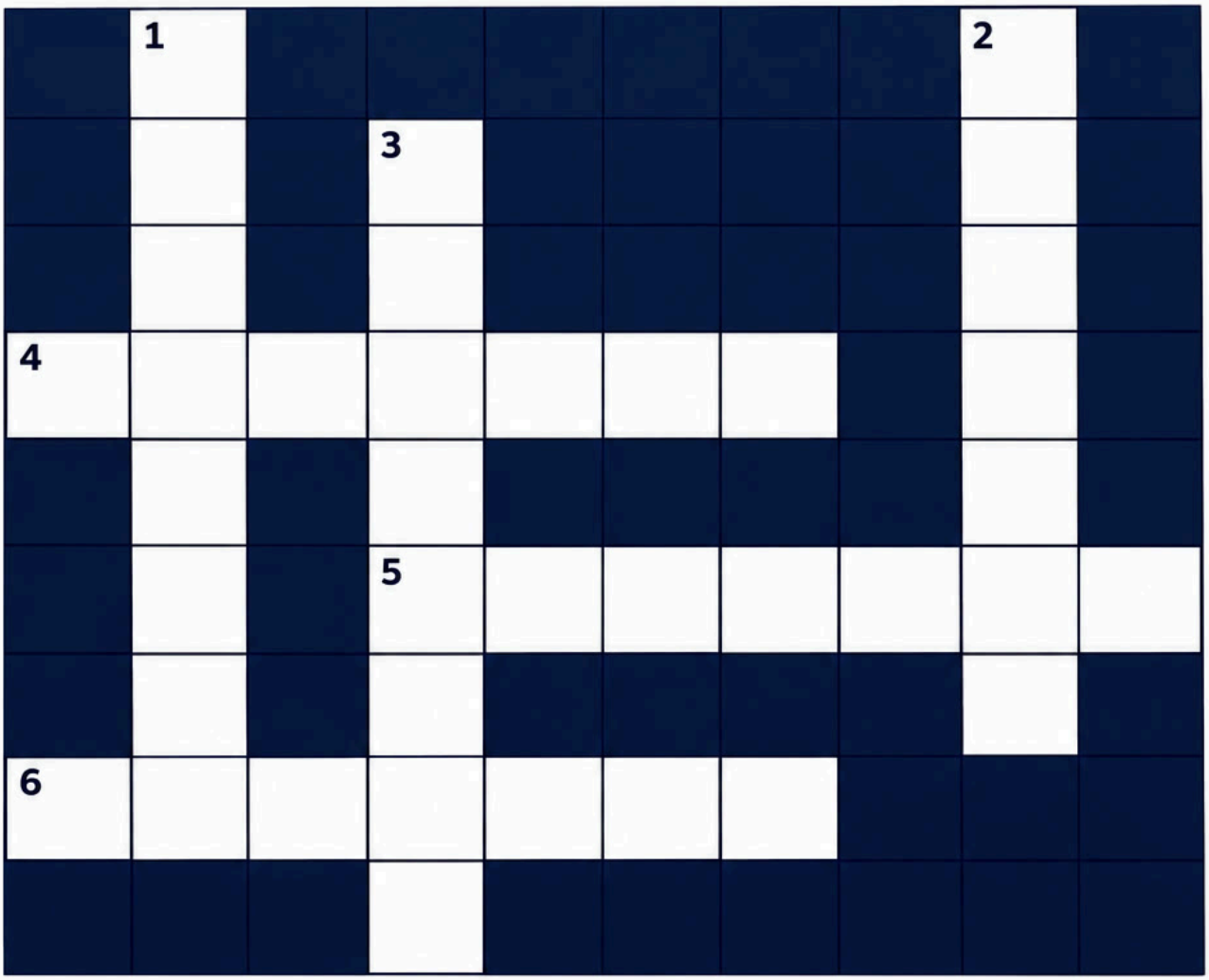
- ☐ BOILING
- ☐ BROMINE
- ☐ CAESIUM
- ☐ ESTIMATE
- ☐ MISSING
- ☐ PATTERN
- ☐ PREDICT
- ☐ TREND

Words go across, down or diagonally. Spaces are left out.

KS3 CHEMISTRY · THE PERIODIC TABLE · LESSON 6

Predicting from patterns

Crossword



Across

4 Elements in a group follow one, which lets you guess about elements you have never seen (7)

5 A ___ value is one you have not been given (7)

6 The ___ points fall down Group 1; they mark the change from solid to liquid (7)

Down

1 The Group 7 element below iodine (8)

2 Lies between chlorine and iodine in Group 7, and boils at 59 °C (7)

3 Work out a value that is not given, from the ones above and below (8)

The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · THE PERIODIC TABLE

Lesson 6: Predicting from patterns

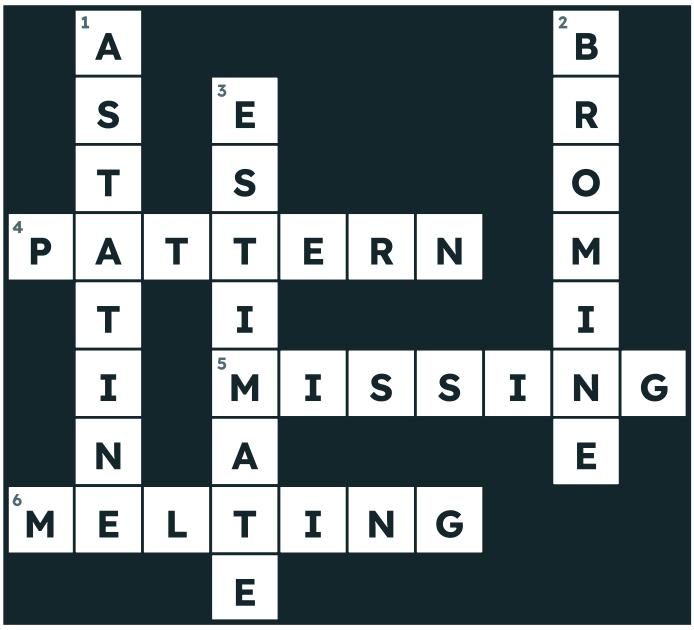
Answers

Word search



C	V	P	A	T	T	E	R	N	A
C	C	A	E	S	I	U	M	A	S
E	N	R	B	O	I	L	I	N	G
M	S	P	B	R	O	M	I	N	E
U	I	T	R	T	R	E	N	D	O
N	E	S	I	E	B	S	E	L	A
W	G	L	S	M	D	D	A	H	S
W	P	R	Y	I	A	I	N	P	W
Y	T	E	A	S	N	T	C	W	L
A	W	D	P	M	I	G	E	T	O

Crossword



	1 A							2 B
	S		3 E					R
	T		S					O
4 P	A	T	T	E	R	N		M
	T		I					I
	I		5 M	I	S	S	I	N G
	N		A					E
6 M	E	L	T	I	N	G		
			E					

Across

4 Pattern
Elements in a group follow one, which lets you guess about elements you have never seen (7)

5 Missing
A ___ value is one you have not been given (7)

6 Melting
The ___ points fall down Group 1; they mark the change from solid to liquid (7)

Down

1 Astatine
The Group 7 element below iodine (8)

2 Bromine
Lies between chlorine and iodine in Group 7, and boils at 59 °C (7)

3 Estimate
Work out a value that is not given, from the ones above and below (8)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the The periodic table lesson 6 page of the KS3 Science revision site.