KS3 SCIENCE · CHEMISTRY

Elements, atoms and compounds

Word search

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

Find these 9 words

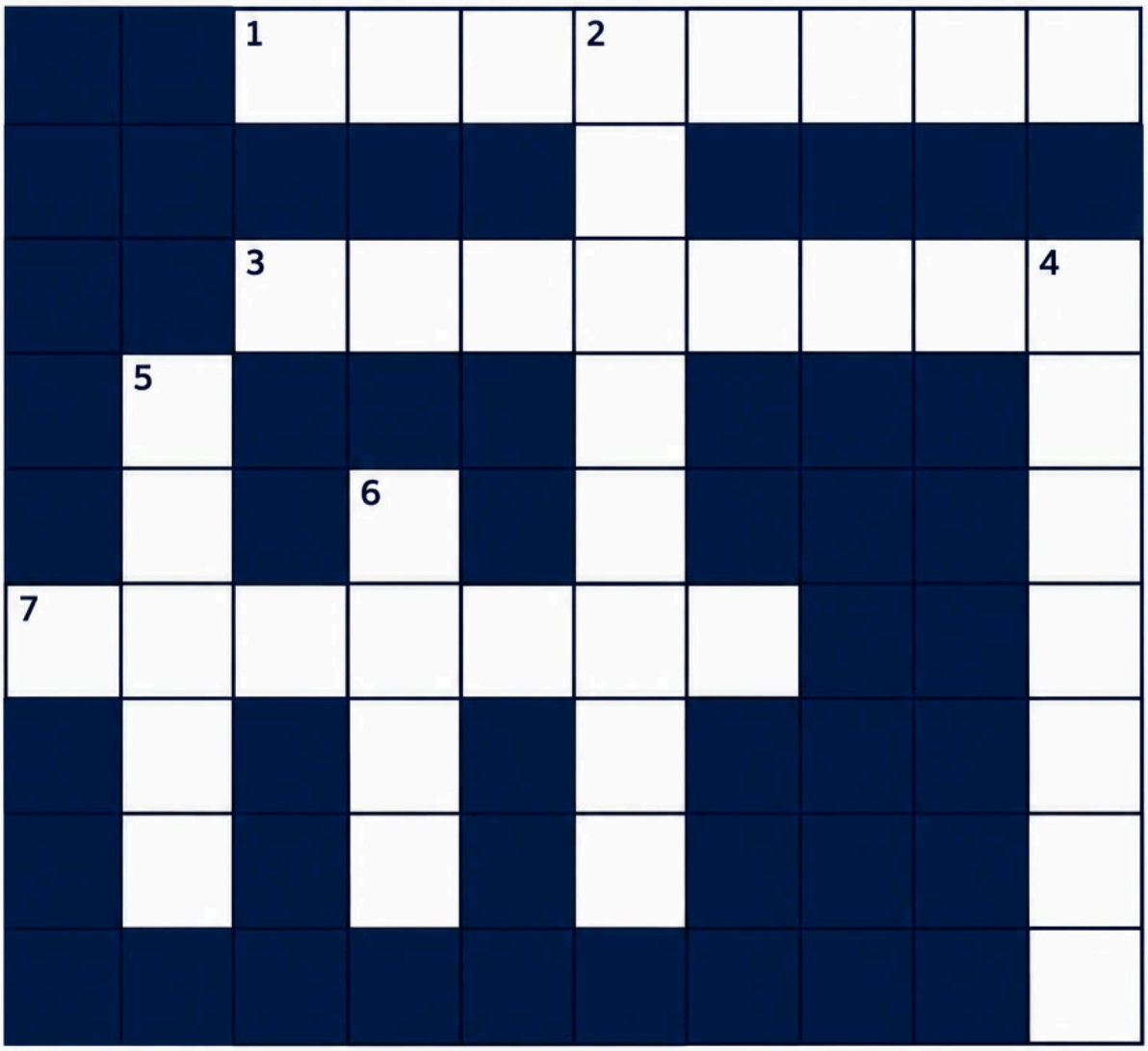
- ☐ ATOM
- ☐ CHLORIDE
- ☐ COMPOUND
- ☐ ELEMENT
- ☐ IRON SULFIDE
- ☐ MIXTURE
- ☐ MOLECULE
- ☐ OXIDE
- ☐ PROPERTY

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

KS3 SCIENCE · CHEMISTRY

Elements, atoms and compounds

Crossword



Across

1 Two or more elements chemically joined together (8)

3 A compound of an element with chlorine (8)

7 Two or more substances mixed together, not joined (7)

Down

2 What a substance is like, such as its colour or whether it is magnetic (8)

4 A substance made of only one type of atom (7)

5 A compound of an element with oxygen (5)

6 The smallest particle of an element that can exist (4)

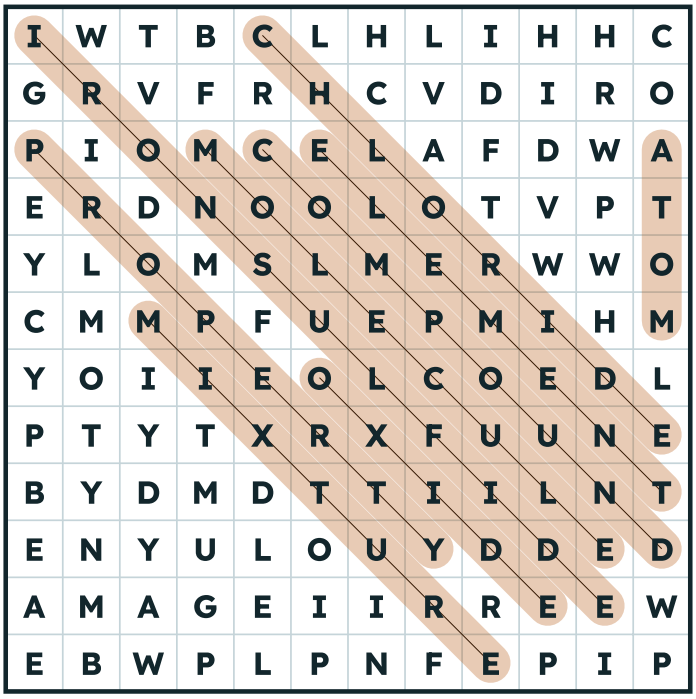
The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY

Elements, atoms and compounds

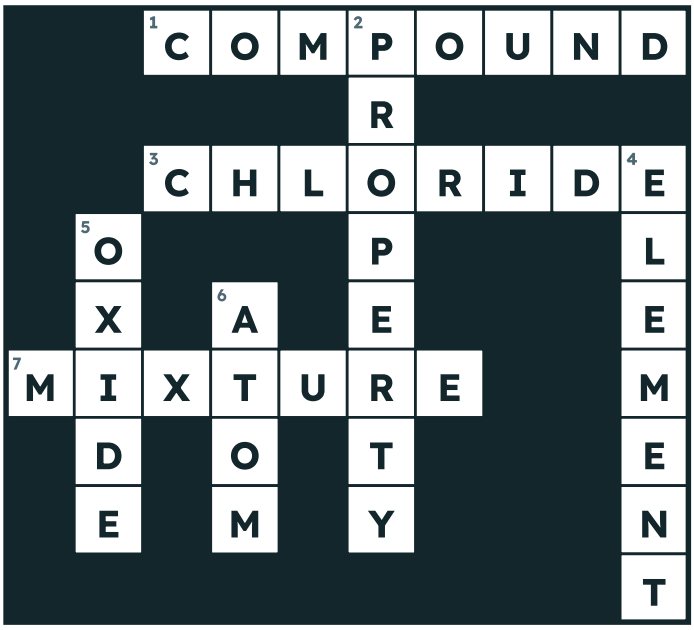
Answers

Word search



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

Crossword



	1 C	O	M	2 P	O	U	N	D
				R				
	3 C	H	L	O	R	I	D	4 E
5 O				P				L
X		6 A		E				E
7 M	I	X	T	U	R	E		M
D		O		T				E
E		M		Y				N
								T

Across

1 Compound
Two or more elements chemically joined together (8)

3 Chloride
A compound of an element with chlorine (8)

7 Mixture
Two or more substances mixed together, not joined (7)

Down

2 Property
What a substance is like, such as its colour or whether it is magnetic (8)

4 Element
A substance made of only one type of atom (7)

5 Oxide
A compound of an element with oxygen (5)

6 Atom
The smallest particle of an element that can exist (4)

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 1

Atoms and elements

Word search

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

Find these 8 words

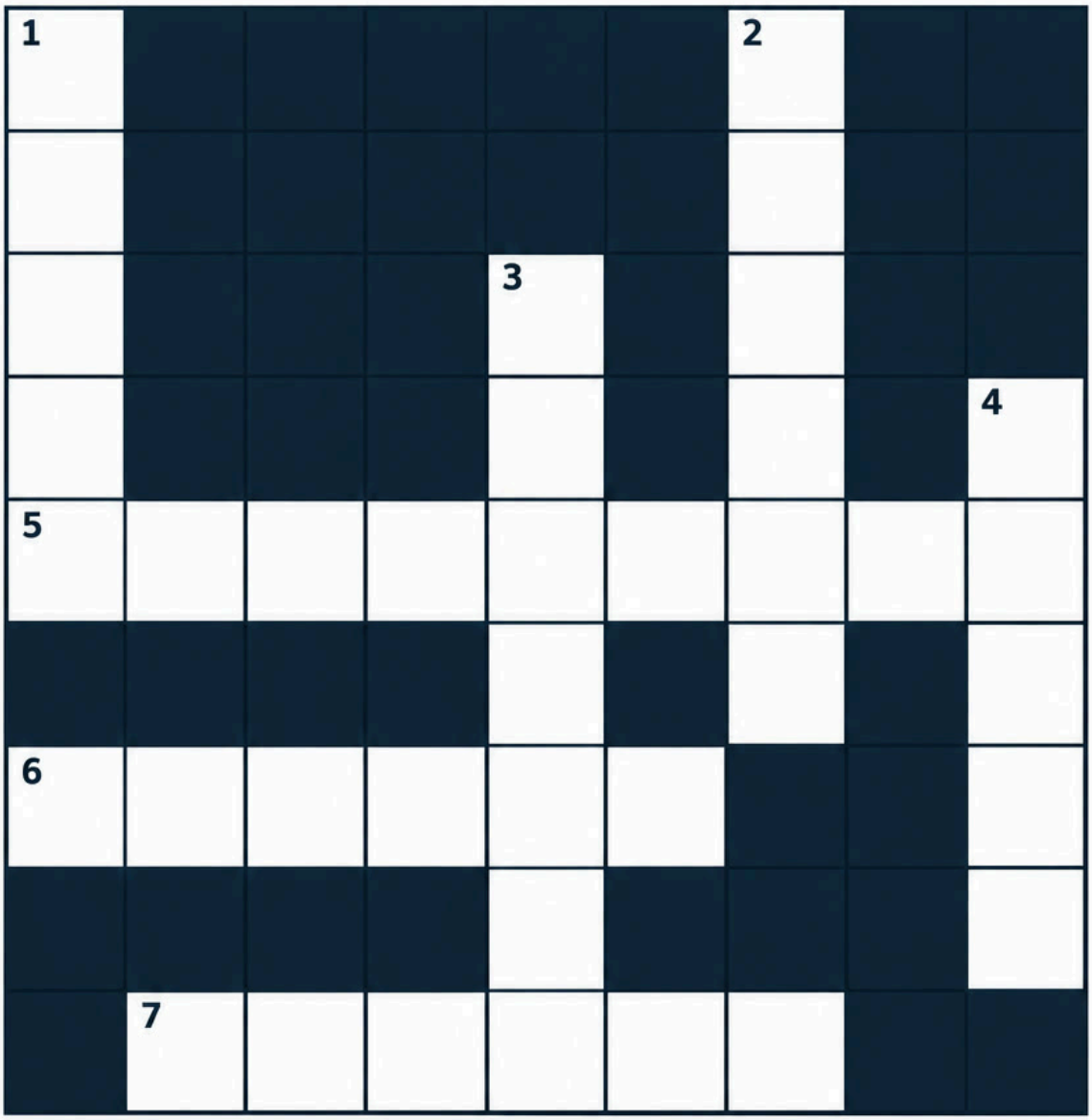
- ☐ BROKEN
- ☐ COPPER
- ☐ DALTON
- ☐ DIFFERENT
- ☐ ELEMENT
- ☐ GOLD
- ☐ IDENTICAL
- ☐ SOLID

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 1

Atoms and elements

Crossword



Across

5 Not the same as each other (9)

6 A reddish-brown metal used for wire and pipes (6)

7 The scientist John ____, who lived about 200 years ago (6)

Down

1 Tiny balls that are this all the way through are not hollow (5)

2 In the model from 200 years ago, an atom cannot be ____ down into anything simpler (6)

3 A substance made of only one type of atom (7)

4 Everything is made of these tiny things (5)

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

KS3 SCIENCE · CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS

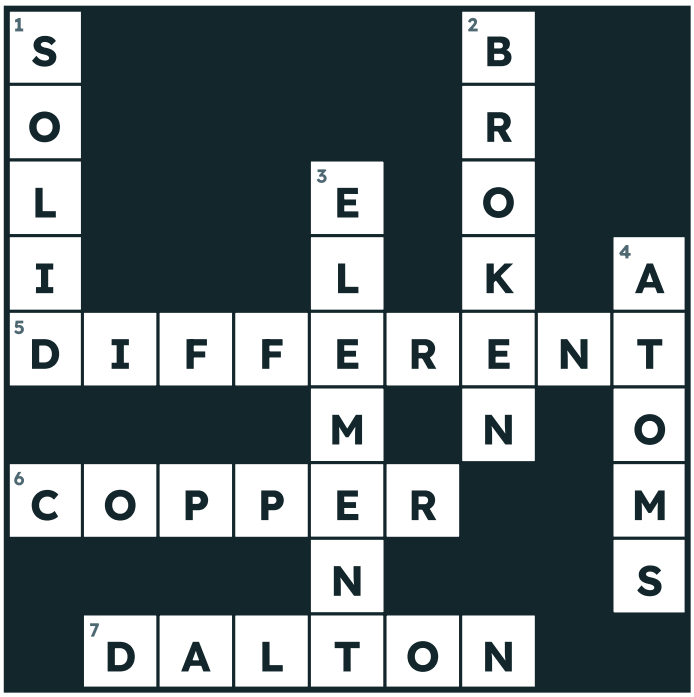
Lesson 1: Atoms and elements

Answers

Word search



Crossword



Across

5 Different
Not the same as each other (9)

6 Copper
A reddish-brown metal used for wire and pipes (6)

7 Dalton
The scientist John ___, who lived about 200 years ago (6)

Down

1 Solid
Tiny balls that are this all the way through are not hollow (5)

2 Broken
In the model from 200 years ago, an atom cannot be ___ down into anything simpler (6)

3 Element
A substance made of only one type of atom (7)

4 Atoms
Everything is made of these tiny things (5)

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 2

Chemical symbols

Word search

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

Find these 8 words

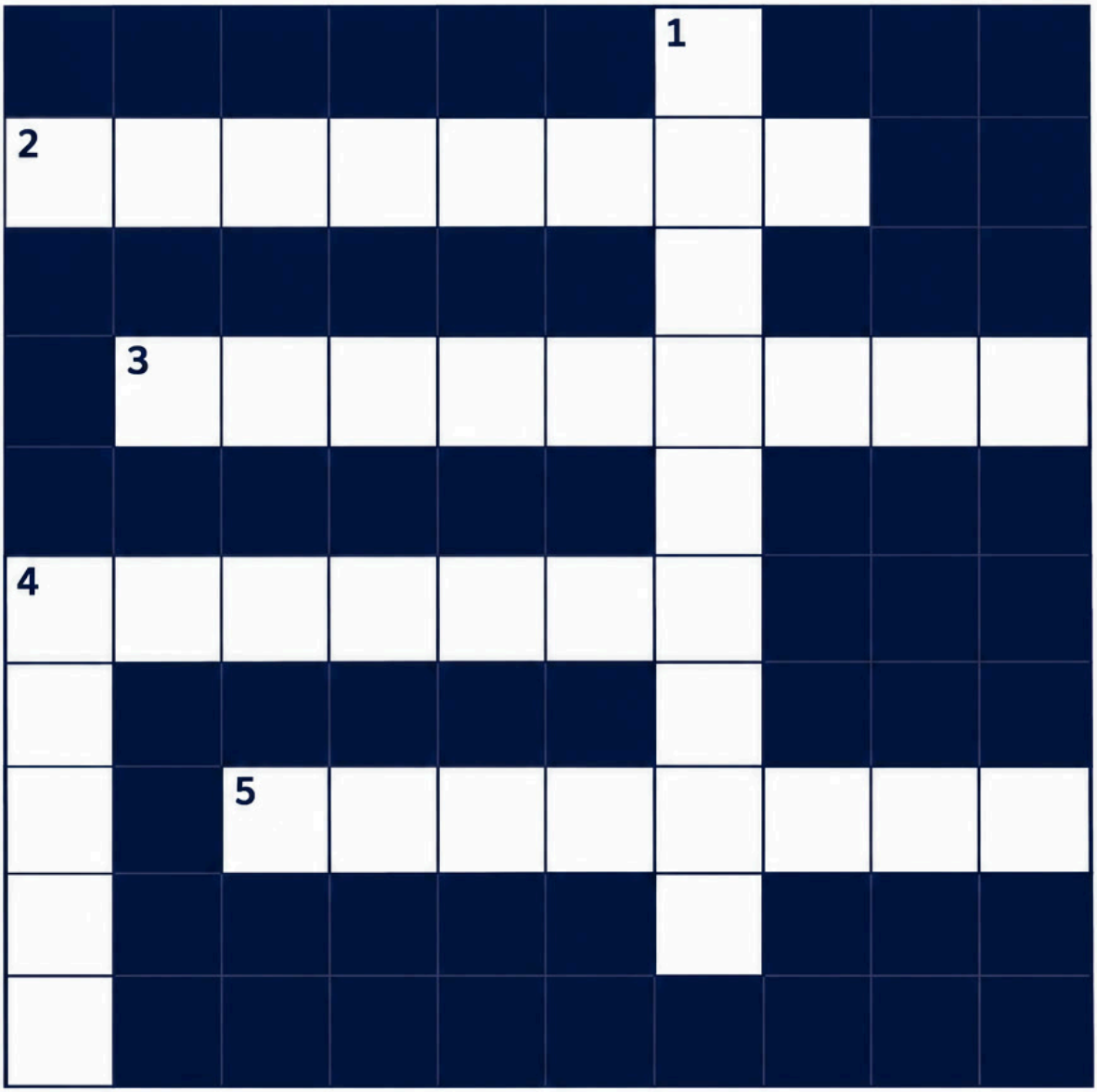
- ☐ CAPITAL
- ☐ CHEMICAL
- ☐ HELIUM
- ☐ LANGUAGE
- ☐ LATIN
- ☐ LETTERS
- ☐ POTASSIUM
- ☐ SODIUM

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 2

Chemical symbols

Crossword



Across

2 Every element has its own ___ symbol (8)

3 Al is the symbol for this metal in a drinks can (9)

4 A symbol has one or two of these (7)

5 Symbols mean the same thing in every one of these (8)

Down

1 Its symbol is Mg, not MG (9)

4 Iron is Fe because ferrum is its ___ name (5)

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

KS3 SCIENCE · CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS

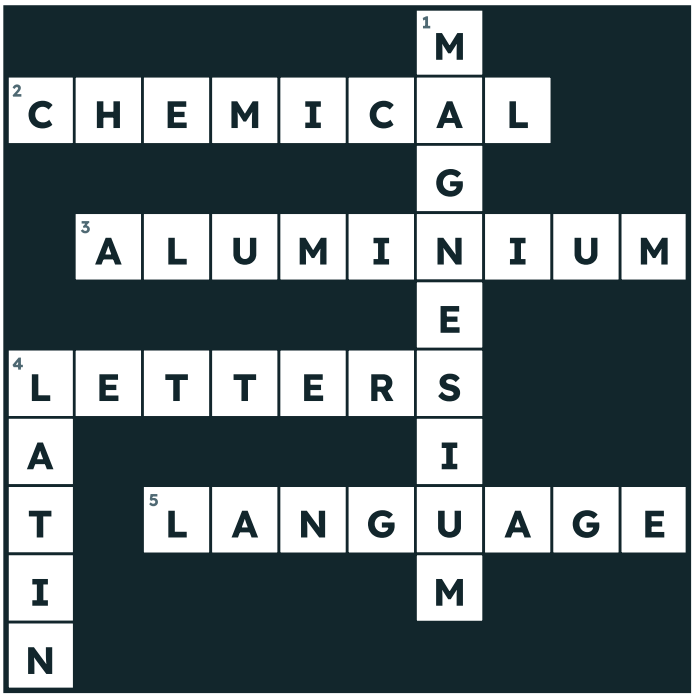
Lesson 2: Chemical symbols

Answers

Word search



Crossword



Across

2 Chemical
Every element has its own ___ symbol (8)

3 Aluminium
Al is the symbol for this metal in a drinks can (9)

4 Letters
A symbol has one or two of these (7)

5 Language
Symbols mean the same thing in every one of these (8)

Down

1 Magnesium
Its symbol is Mg, not MG (9)

4 Latin
Iron is Fe because ferrum is its ___ name (5)

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 3

Compounds

Word search

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

Find these 7 words

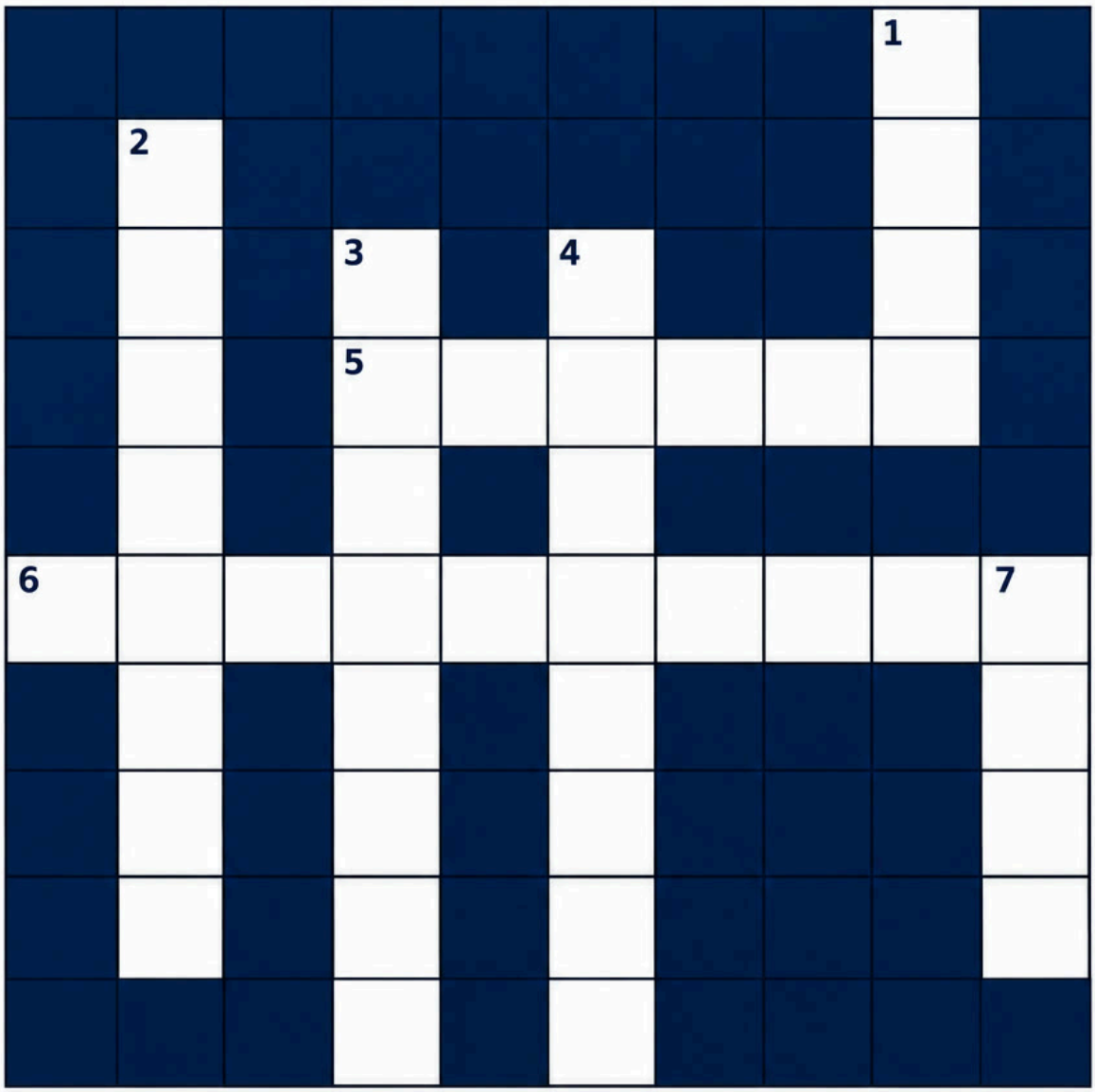
- ☐ CHLORINE
- ☐ COMPOUND
- ☐ OXYGEN
- ☐ PROPERTIES
- ☐ REACTION
- ☐ REARRANGED
- ☐ SALT

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 3

Compounds

Crossword



Across

5 A molecule of water has one atom of this (6)

6 What a substance is like, such as its colour or whether it fizzes (10)

Down

1 A grey metal with the symbol Fe (4)

2 A pale green poisonous gas (8)

3 Made of two or more elements chemically joined together (8)

4 A molecule of water has two atoms of this (8)

7 The white crystals you put on food (4)

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

KS3 SCIENCE · CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS

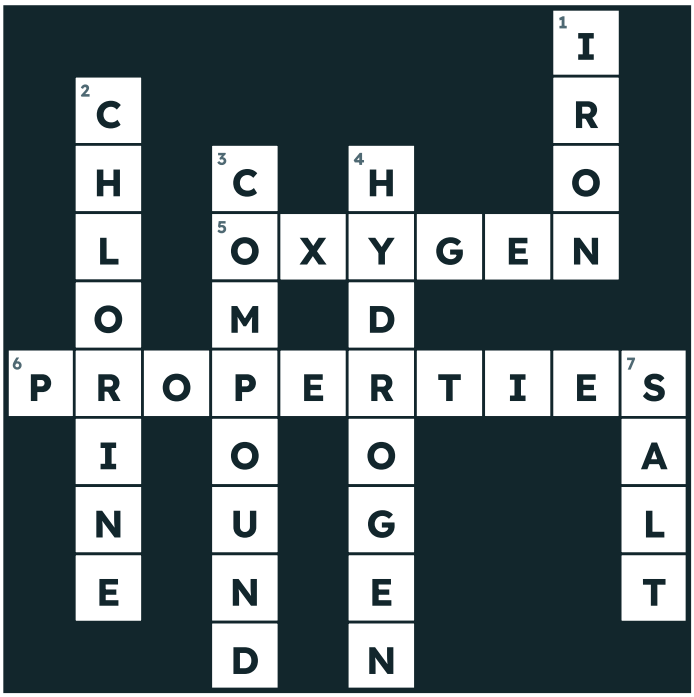
Lesson 3: Compounds

Answers

Word search



Crossword



Across

5 Oxygen
A molecule of water has one atom of this (6)

6 Properties
What a substance is like, such as its colour or whether it fizzes (10)

Down

1 Iron
A grey metal with the symbol Fe (4)

2 Chlorine
A pale green poisonous gas (8)

3 Compound
Made of two or more elements chemically joined together (8)

4 Hydrogen
A molecule of water has two atoms of this (8)

7 Salt
The white crystals you put on food (4)

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 4

Chemical formulae

Word search

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

Find these 8 words

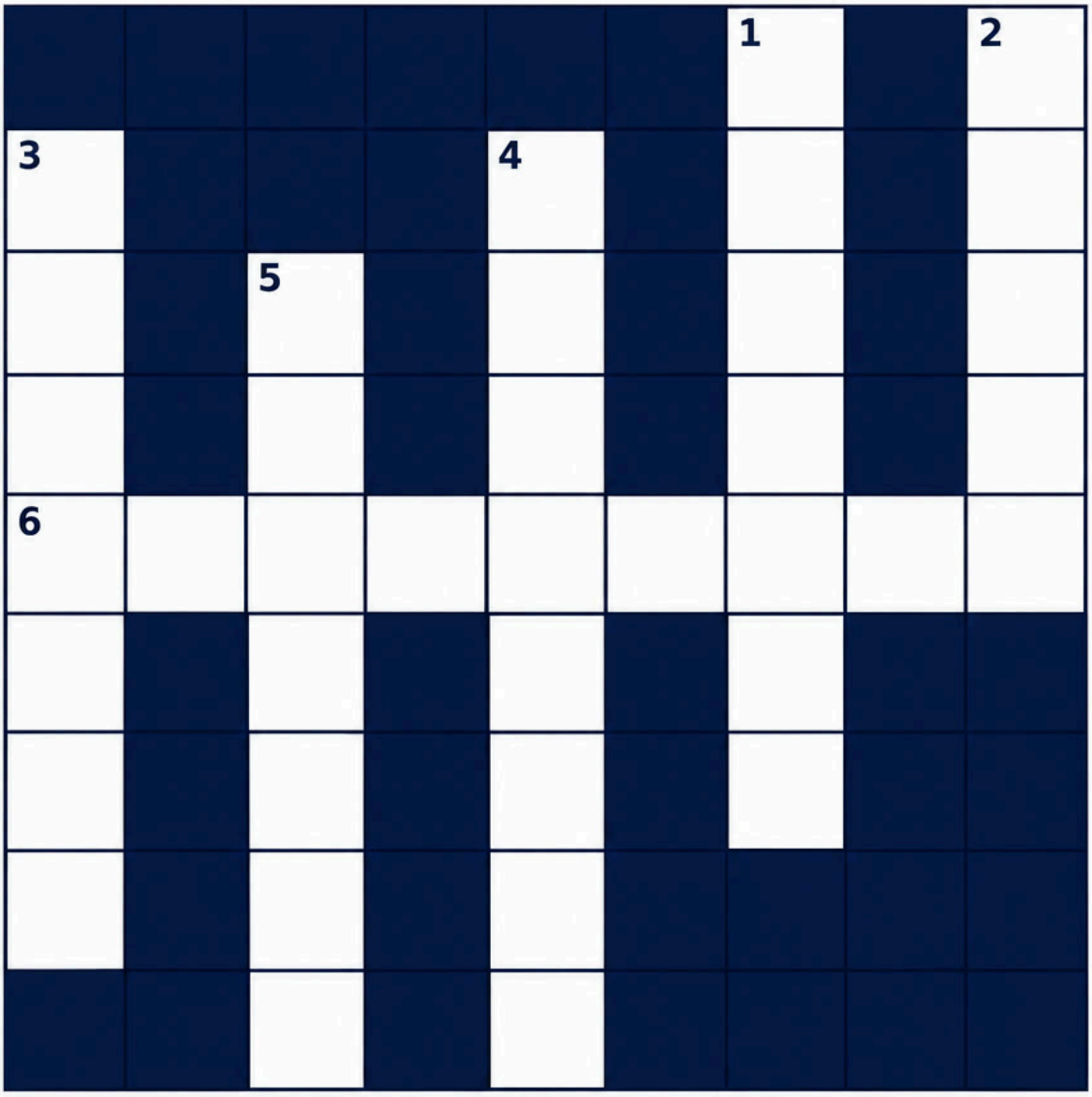
- ☐ CARBONATE
- ☐ CHLORIDE
- ☐ FORMULA
- ☐ METAL
- ☐ METHANE
- ☐ OXIDE
- ☐ RATIO
- ☐ SYMBOLS

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 4

Chemical formulae

Crossword



Across

6 The second word in the name of $CaCO_3$ (9)

Down

1 A molecule of this has one carbon atom and four hydrogen atoms (7)

2 Magnesium ___, MgO (5)

3 The element with the symbol Ca (7)

4 Sodium ___, NaCl, ends in -ide (8)

5 H_2O is one of these for water (7)

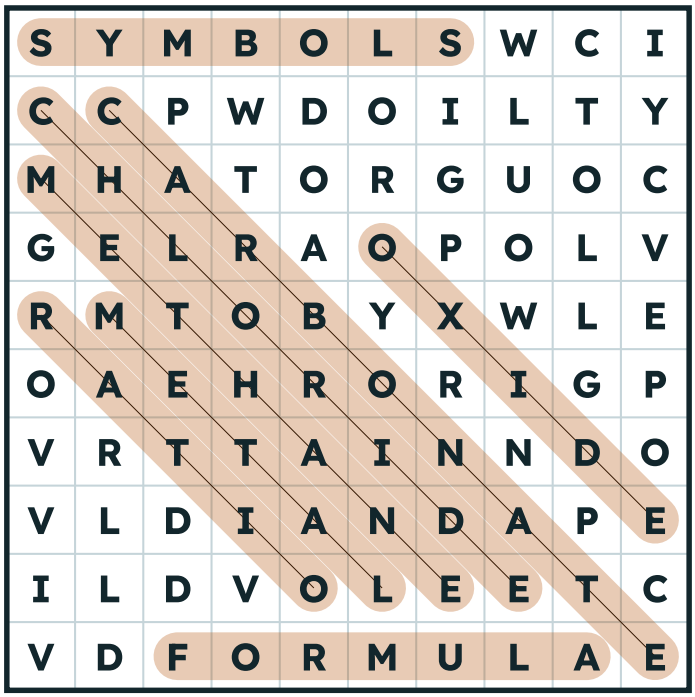
The number in brackets is how many letters the answer has.

KS3 SCIENCE · CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS

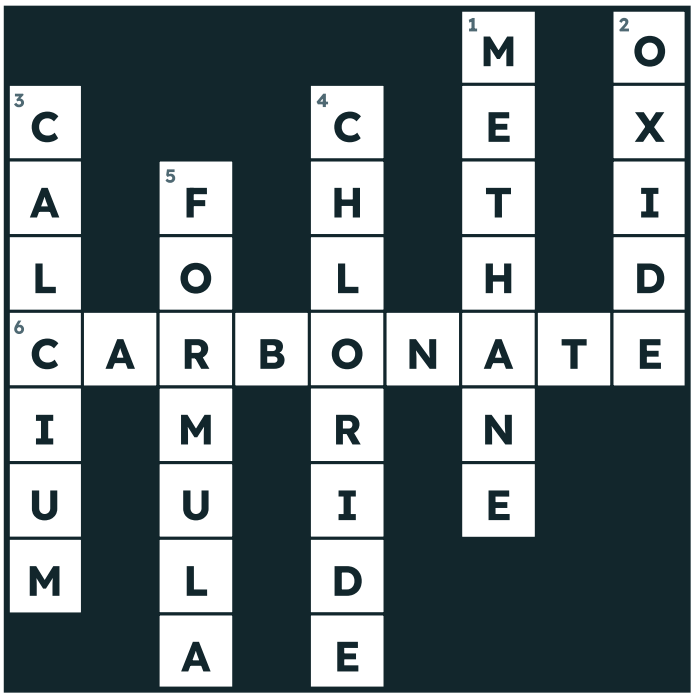
Lesson 4: Chemical formulae

Answers

Word search



Crossword



Across

6 Carbonate
The second word in the name of CaCO3 (9)

Down

1 Methane
A molecule of this has one carbon atom and four hydrogen atoms (7)

2 Oxide
Magnesium ___, MgO (5)

3 Calcium
The element with the symbol Ca (7)

4 Chloride
Sodium ___, NaCl, ends in -ide (8)

5 Formula
H2O is one of these for water (7)

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 5

Elements, compounds and mixtures

Word search

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

Find these 8 words

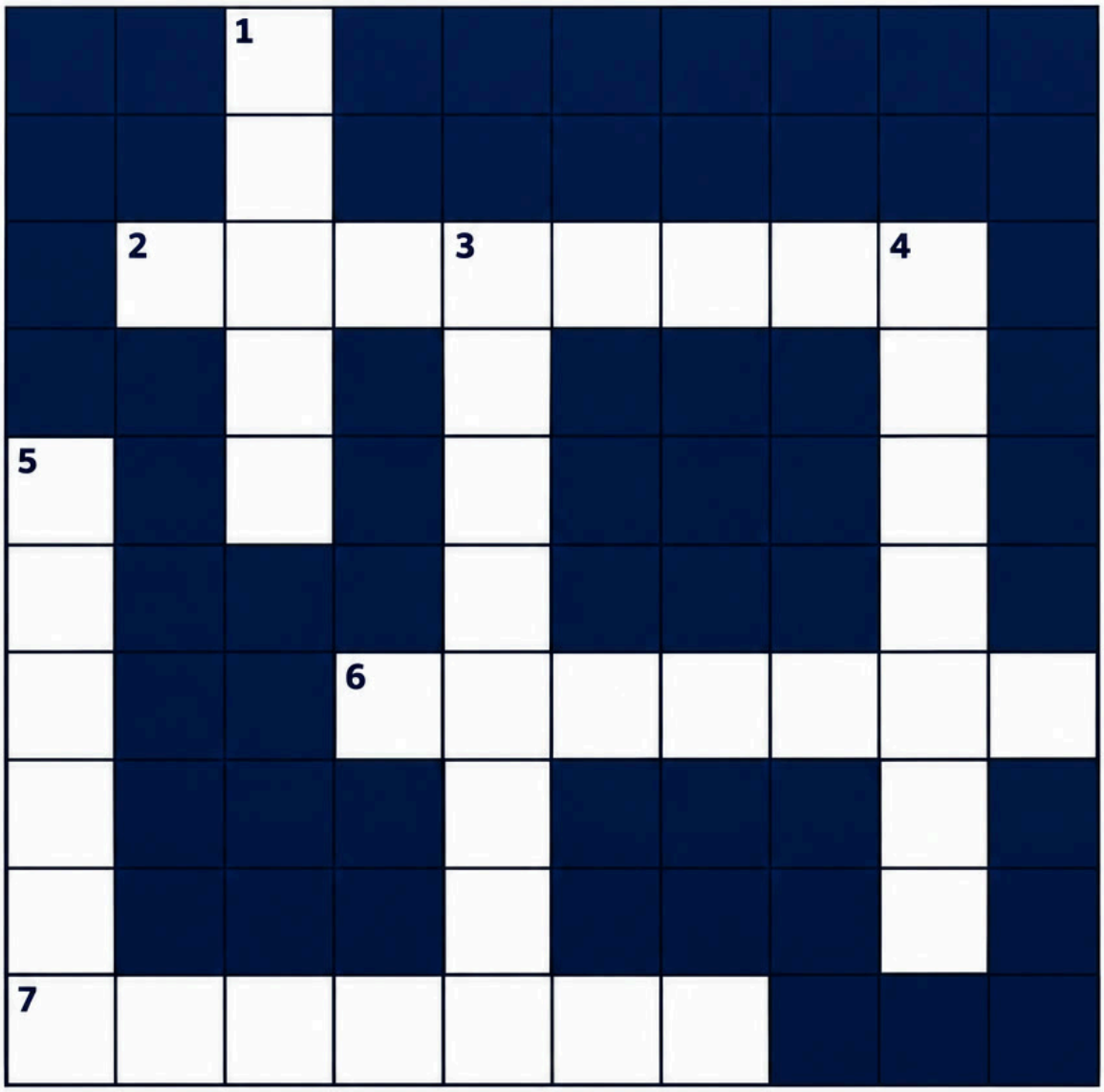
- ☐ ATOMS
- ☐ COMPOUND
- ☐ DIAGRAM
- ☐ ELEMENT
- ☐ OVERLAP
- ☐ PARTICLE
- ☐ PURE
- ☐ SINGLE

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

KS3 CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS · LESSON 5

Elements, compounds and mixtures

Crossword



Across

2 A substance made of two or more types of atom chemically joined together (8)

6 Two or more substances mixed together but not chemically joined (7)

7 Only one type of atom, such as the gold in a ring (7)

Down

1 Everything is made of these tiny things (5)

3 A tiny piece of a substance, drawn as a circle or a joined group (8)

4 A drawing that uses circles to show what is in a substance (7)

5 On its own, not joined to others (6)

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

KS3 SCIENCE · CHEMISTRY · ELEMENTS, ATOMS AND COMPOUNDS

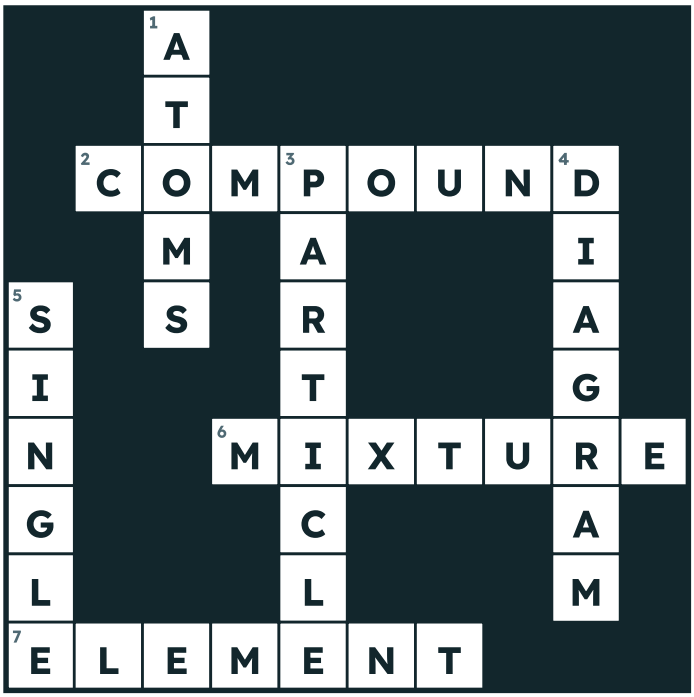
Lesson 5: Elements, compounds and mixtures

Answers

Word search

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

Crossword



Across

2 Compound
A substance made of two or more types of atom chemically joined together (8)

6 Mixture
Two or more substances mixed together but not chemically joined (7)

7 Element
Only one type of atom, such as the gold in a ring (7)

Down

1 Atoms
Everything is made of these tiny things (5)

3 Particle
A tiny piece of a substance, drawn as a circle or a joined group (8)

4 Diagram
A drawing that uses circles to show what is in a substance (7)

5 Single
On its own, not joined to others (6)

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