KS3 SCIENCE · CHEMISTRY

Acids and alkalis

Word search

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

Find these 10 words

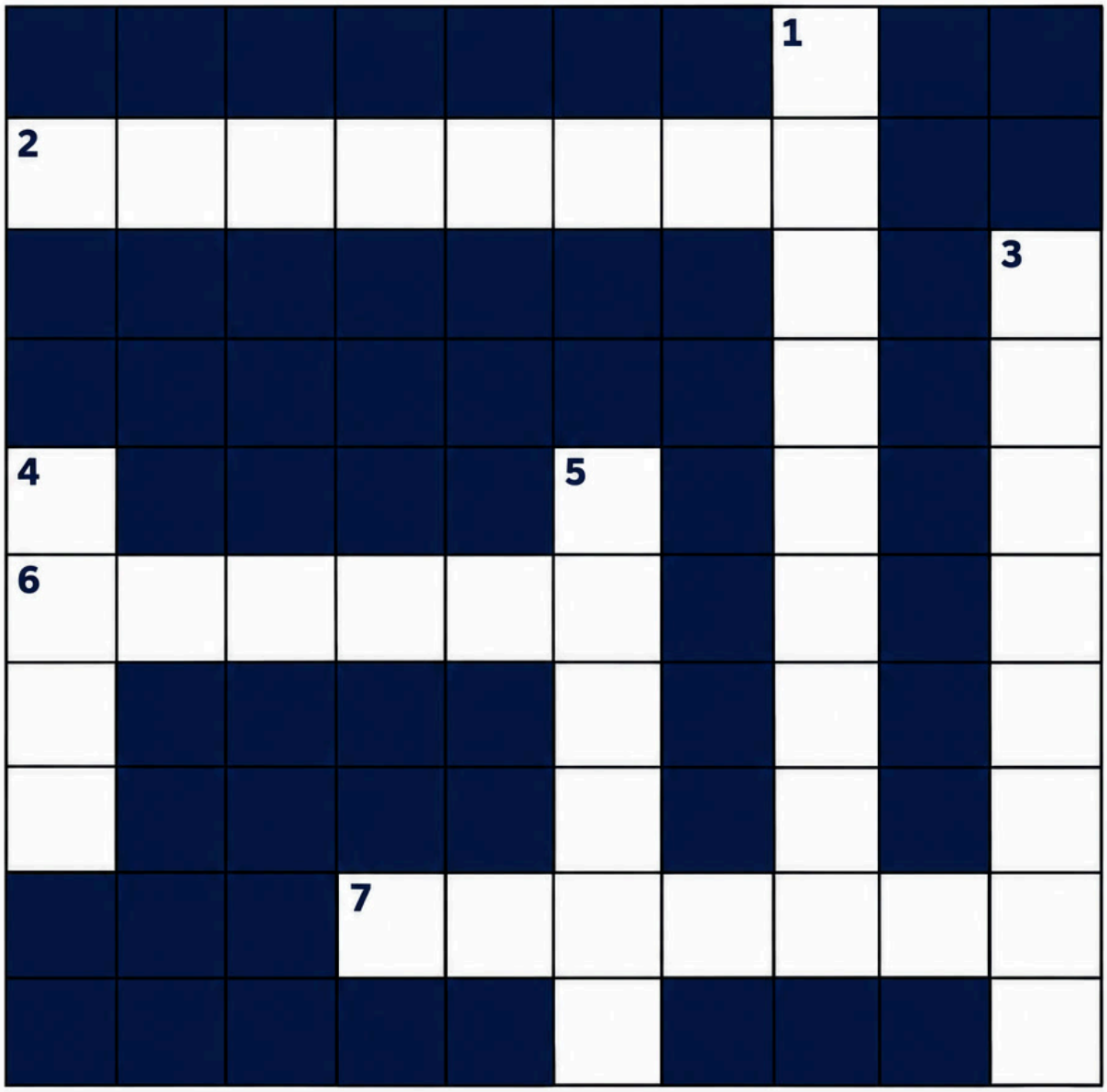
- ☐ ACID
- ☐ ALKALI
- ☐ BASE
- ☐ CORROSIVE
- ☐ CRYSTALS
- ☐ EVAPORATION
- ☐ HYDROGEN
- ☐ INDICATOR
- ☐ LITMUS
- ☐ SALT

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

KS3 SCIENCE · CHEMISTRY

Acids and alkalis

Crossword



Across

2 Gas made when a metal reacts with an acid (8)

6 Has a pH above 7 (6)

7 pH 7, neither acid nor alkali (7)

Down

1 Changes colour in acids and alkalis (9)

3 Solid salt left after evaporation (8)

4 Any substance that neutralises an acid (4)

5 Red in acid, blue in alkali (6)

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

KS3 SCIENCE · CHEMISTRY

Acids and alkalis

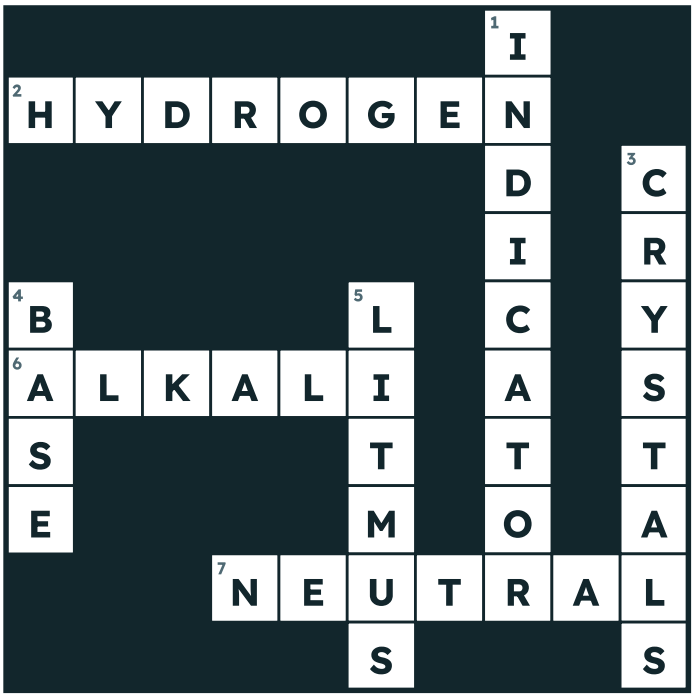
Answers

Word search



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

Crossword



Across

2 Hydrogen
Gas made when a metal reacts with an acid (8)

6 Alkali
Has a pH above 7 (6)

7 Neutral
pH 7, neither acid nor alkali (7)

Down

1 Indicator
Changes colour in acids and alkalis (9)

3 Crystals
Solid salt left after evaporation (8)

4 Base
Any substance that neutralises an acid (4)

5 Litmus
Red in acid, blue in alkali (6)

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 1

Acids and alkalis around us

Word search

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

Find these 8 words

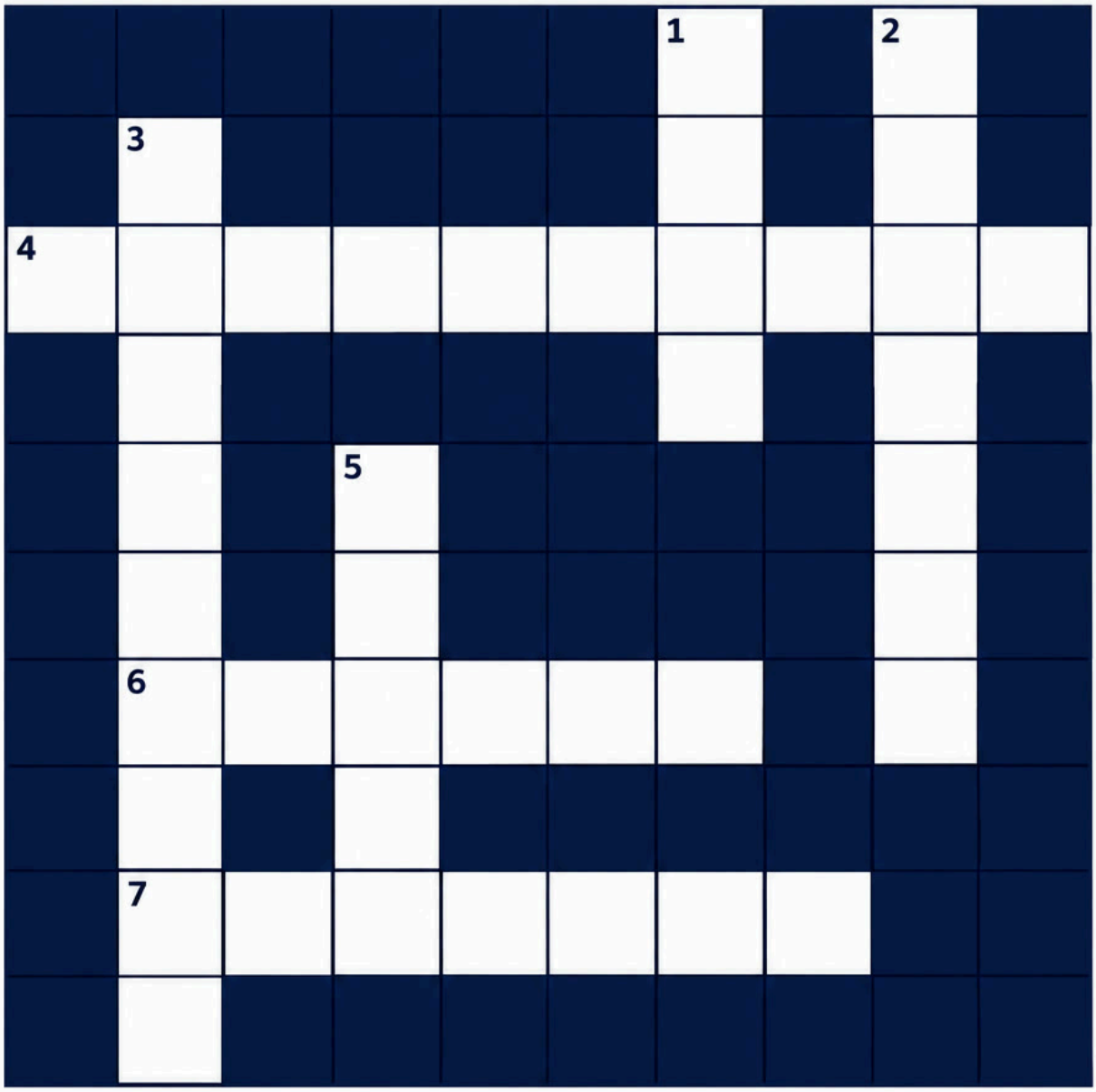
- ☐ ACID
- ☐ ALKALI
- ☐ CORROSIVE
- ☐ HAZARD
- ☐ KITCHEN
- ☐ SOAP
- ☐ TOOTHPASTE
- ☐ VINEGAR

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 1

Acids and alkalis around us

Crossword



Across

4 Squeezed onto a brush to clean your teeth (10)

6 A small picture on a label that warns you (6)

7 A bottled liquid that tastes sharp and is found in many homes (7)

Down

1 A bar used for washing your hands (4)

2 The room in the house where you cook (7)

3 Destroys skin and eyes (9)

5 A yellow fruit squeezed for its juice (5)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

Lesson 1: Acids and alkalis around us

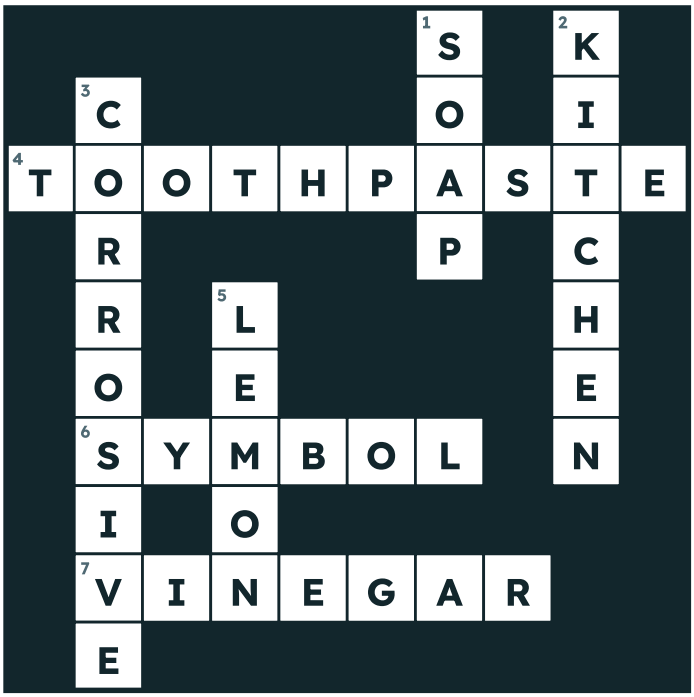
Answers

Word search



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

Crossword



Across

4 Toothpaste
Squeezed onto a brush to clean your teeth (10)

6 Symbol
A small picture on a label that warns you (6)

7 Vinegar
A bottled liquid that tastes sharp and is found in many homes (7)

Down

1 Soap
A bar used for washing your hands (4)

2 Kitchen
The room in the house where you cook (7)

3 Corrosive
Destroys skin and eyes (9)

5 Lemon
A yellow fruit squeezed for its juice (5)

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

KS3 CHEMISTRY • ACIDS AND ALKALIS • LESSON 2

Indicators

Word search

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

Find these 8 words

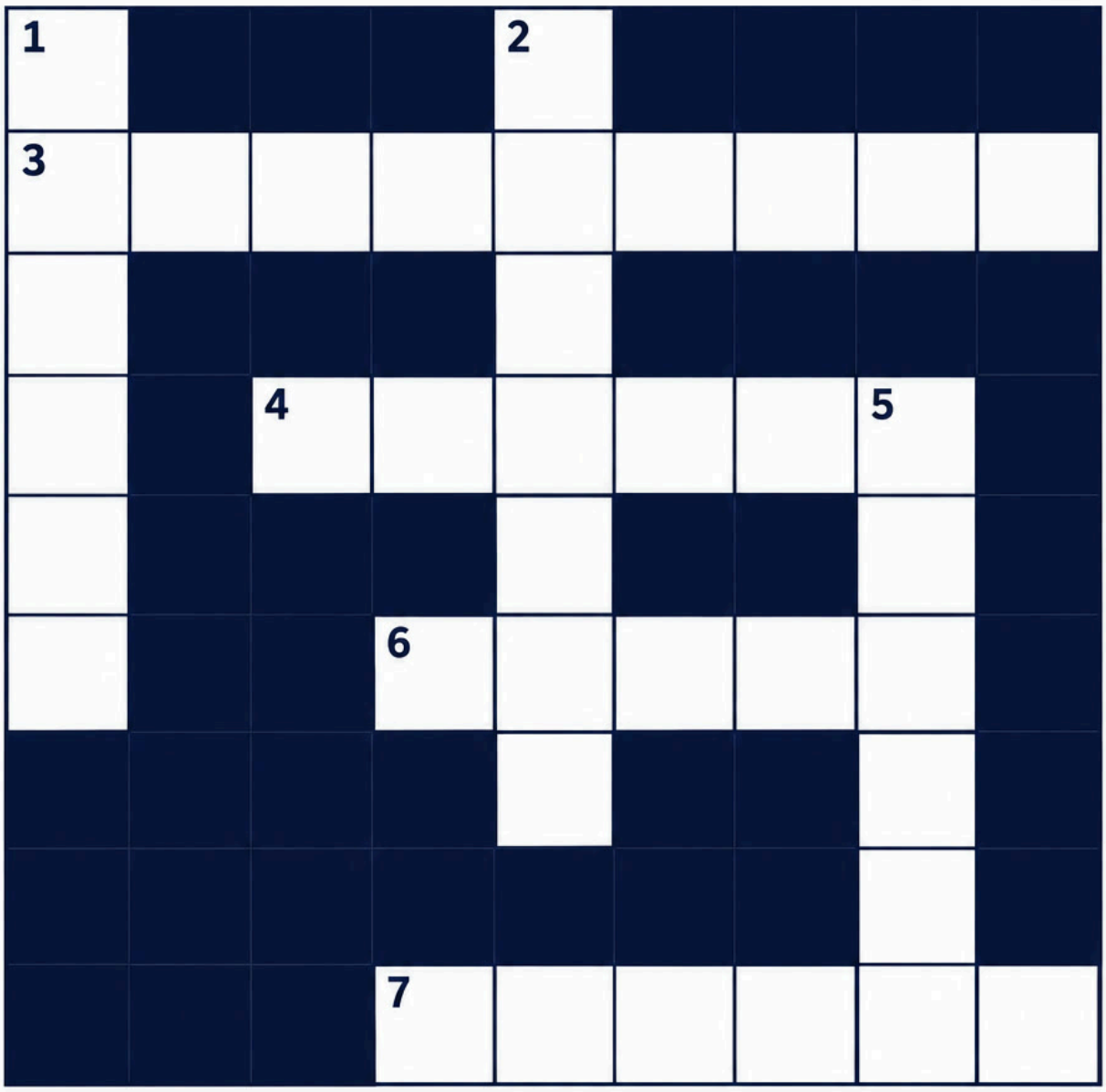
- ☐ GREEN
- ☐ INDICATOR
- ☐ LITMUS
- ☐ ORANGE
- ☐ PURPLE
- ☐ STRONG
- ☐ UNIVERSAL
- ☐ WATER

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 2

Indicators

Crossword



Across

3 Shows a rainbow of colours for pH (9)

4 Red in an acid and blue in an alkali (6)

6 Pure ___ is not an acid or an alkali (5)

7 A colour that means an acid, between red and yellow (6)

Down

1 The colour that goes with blue to mean alkali (6)

2 Neither an acid nor an alkali (7)

5 The opposite of weak, for an acid or alkali (6)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

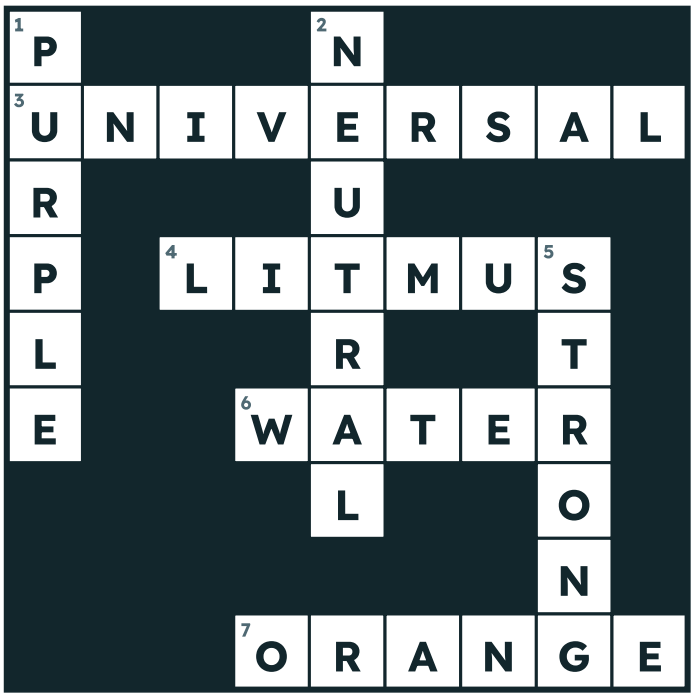
Lesson 2: Indicators

Answers

Word search

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

Crossword



Across

3 Universal
Shows a rainbow of colours for pH (9)

4 Litmus
Red in an acid and blue in an alkali (6)

6 Water
Pure ___ is not an acid or an alkali (5)

7 Orange
A colour that means an acid, between red and yellow (6)

Down

1 Purple
The colour that goes with blue to mean alkali (6)

2 Neutral
Neither an acid nor an alkali (7)

5 Strong
The opposite of weak, for an acid or alkali (6)

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

KS3 CHEMISTRY • ACIDS AND ALKALIS • LESSON 3

The pH scale

Word search

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

Find these 8 words

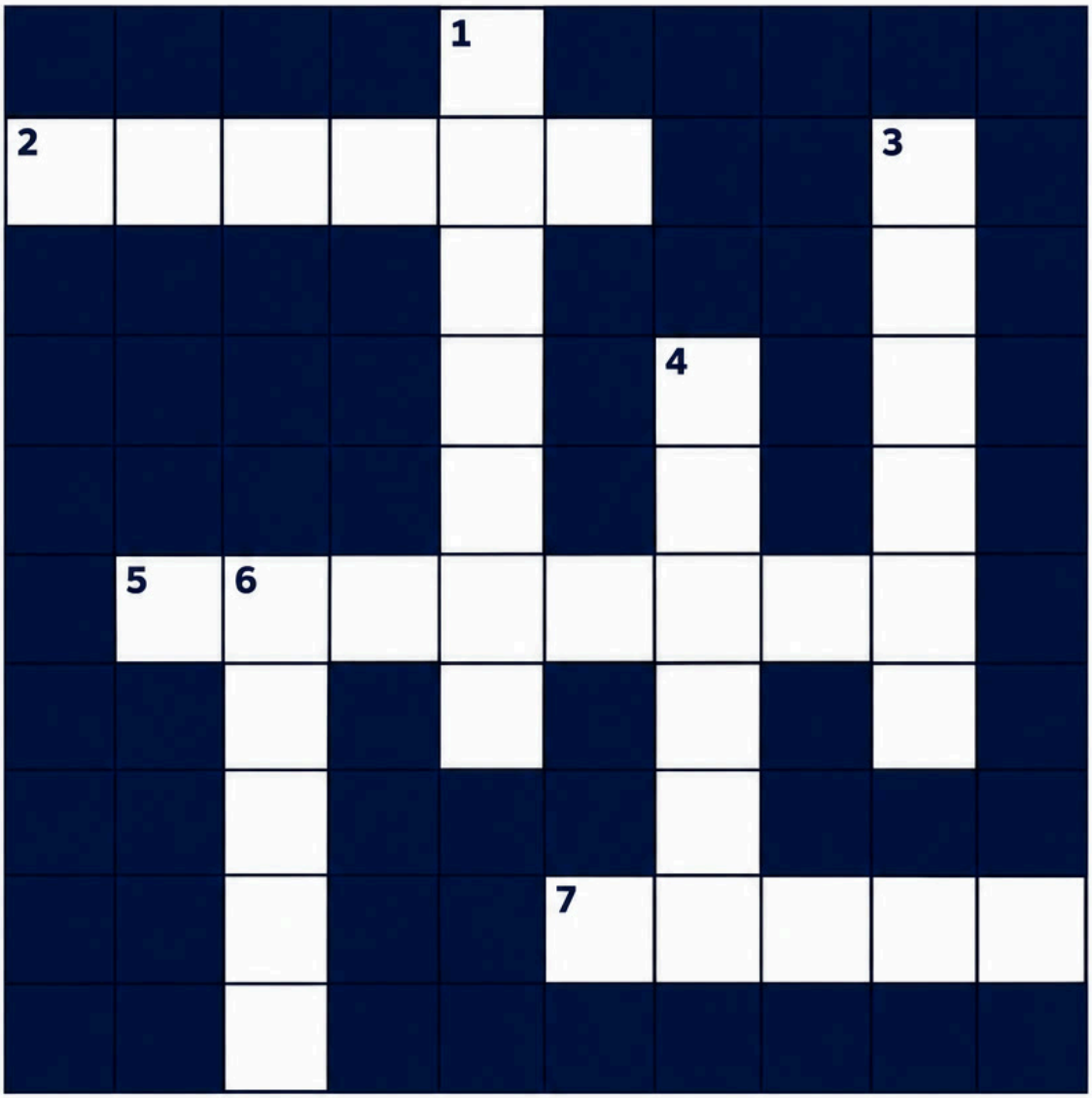
- ☐ ACIDIC
- ☐ ALKALINE
- ☐ HIGHER
- ☐ LOWER
- ☐ NEUTRAL
- ☐ NUMBER
- ☐ SCALE
- ☐ STRONGEST

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 3

The pH scale

Crossword



Across

2 A pH of 7 is this, not a word (6)

5 Describes something with a pH above 7 (8)

7 The pH ___ runs from 0 to 14 (5)

Down

1 pH 7 is this (7)

3 Further up towards 14 (6)

4 Describes something with a pH below 7 (6)

6 A pH of 3 is ___ than 7 (5)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

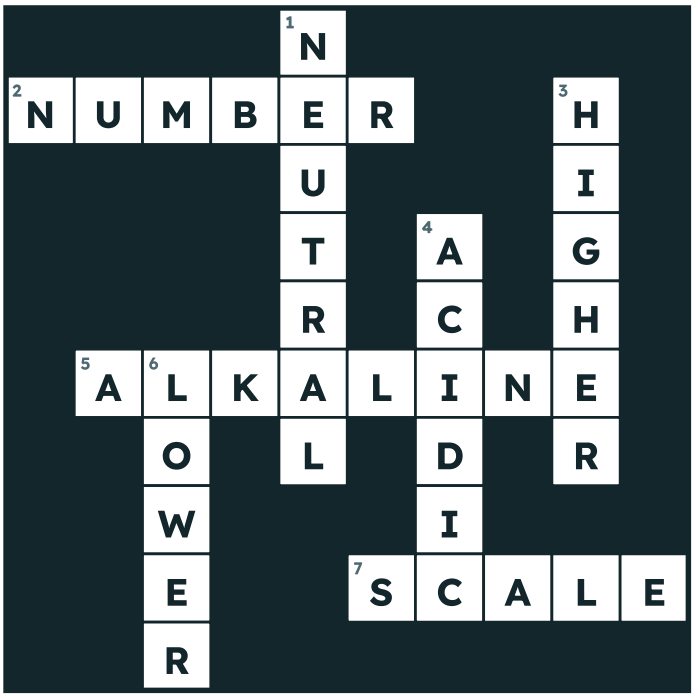
Lesson 3: The pH scale

Answers

Word search

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

Crossword



Across

2 Number
A pH of 7 is this, not a word (6)

5 Alkaline
Describes something with a pH above 7 (8)

7 Scale
The pH ___ runs from 0 to 14 (5)

Down

1 Neutral
pH 7 is this (7)

3 Higher
Further up towards 14 (6)

4 Acidic
Describes something with a pH below 7 (6)

6 Lower
A pH of 3 is ___ than 7 (5)

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 4

Neutralisation

Word search

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

Find these 7 words

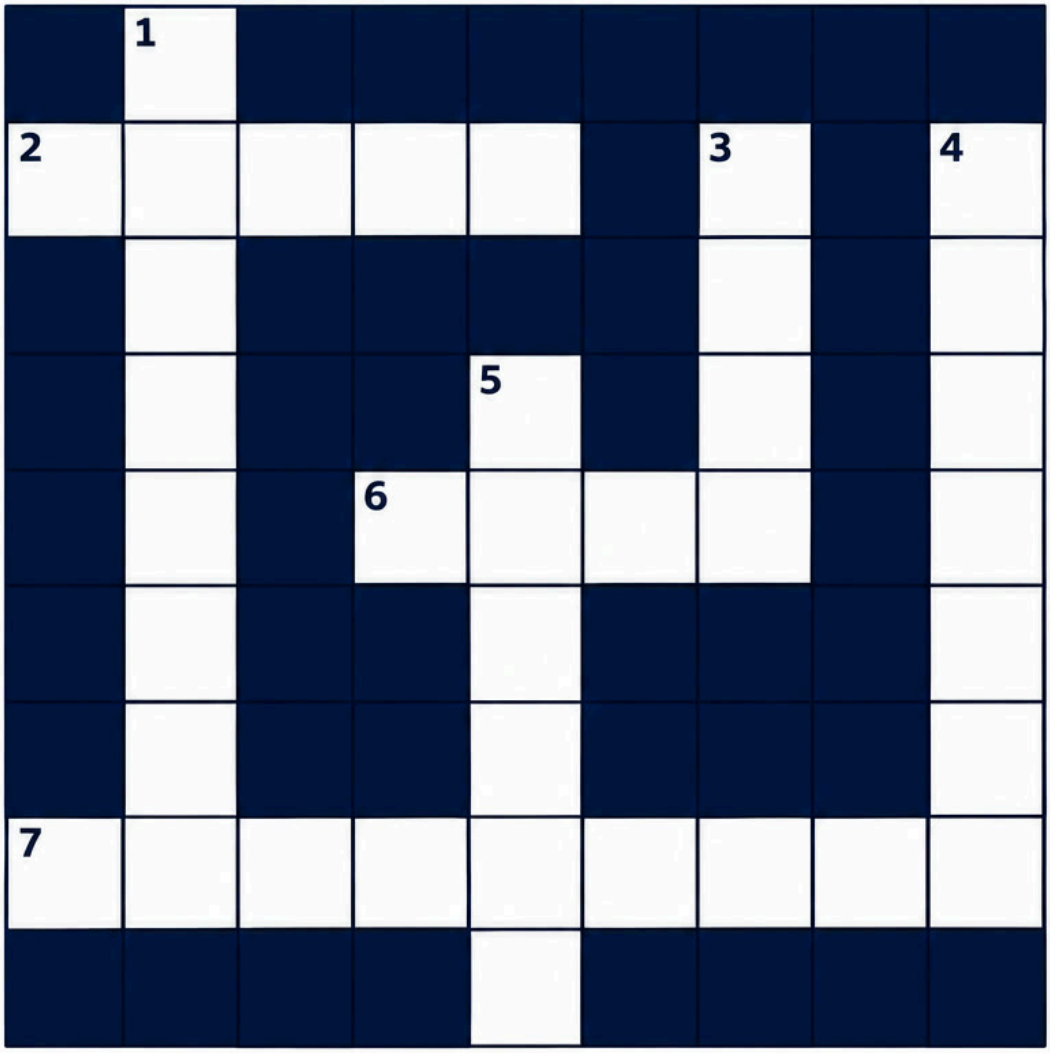
- ☐ CANCEL
- ☐ MOVES
- ☐ NEUTRAL
- ☐ PAST
- ☐ SALT
- ☐ SOLUTION
- ☐ UNIVERSAL

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 4

Neutralisation

Crossword



Across

2 The pH ____ towards 7 as you add alkali to an acid (5)

6 Made, with water, when an acid and an alkali react (4)

7 ____ indicator turns green at pH 7 (9)

Down

1 The liquid whose pH reaches 7 when just enough alkali is added (8)

3 Add too much alkali and the pH carries on ____ 7 (4)

4 pH 7: neither acid nor alkali (7)

5 An acid and an alkali ____ each other out (6)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

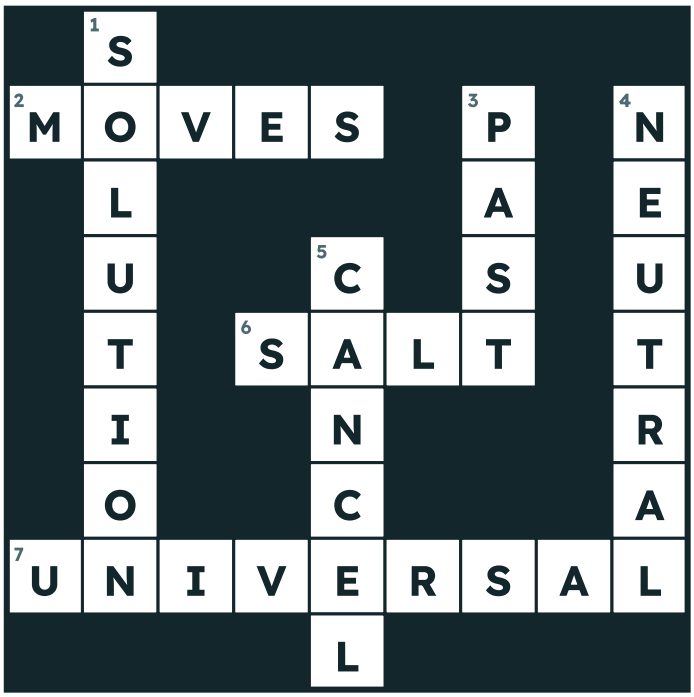
Lesson 4: Neutralisation

Answers

Word search

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

Crossword



Across

2 Moves
The pH ___ towards 7 as you add alkali to an acid (5)

6 Salt
Made, with water, when an acid and an alkali react (4)

7 Universal
___ indicator turns green at pH 7 (9)

Down

1 Solution
The liquid whose pH reaches 7 when just enough alkali is added (8)

3 Past
Add too much alkali and the pH carries on ___ 7 (4)

4 Neutral
pH 7: neither acid nor alkali (7)

5 Cancel
An acid and an alkali ___ each other out (6)

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 5

Making a salt

Word search

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

Find these 8 words

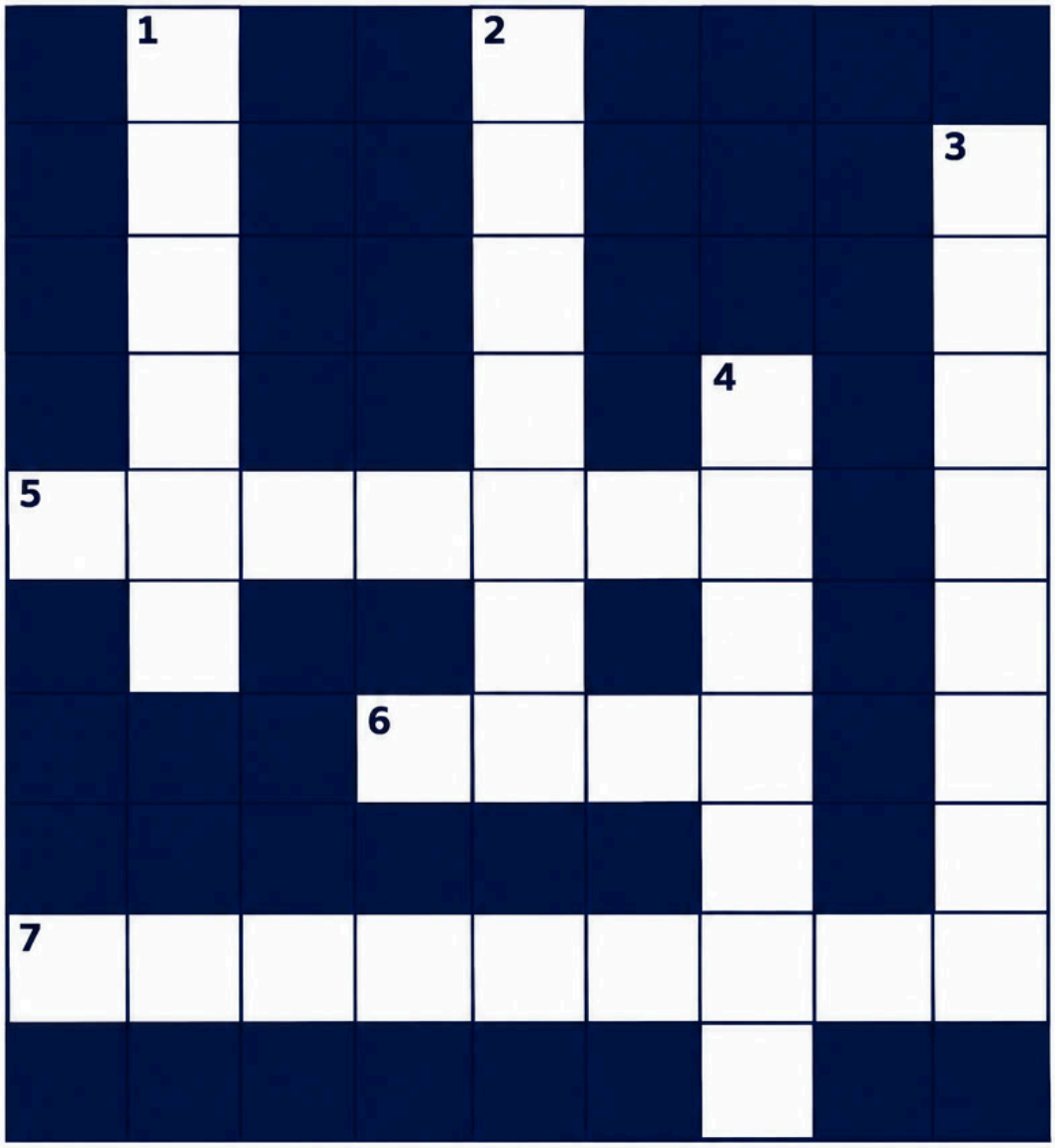
- ☐ BASIN
- ☐ CHLORIDE
- ☐ COOL
- ☐ CRYSTALS
- ☐ EVAPORATE
- ☐ HEAT
- ☐ NEUTRAL
- ☐ SULFATE

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 5

Making a salt

Crossword



Across

5 Sulfuric acid makes this kind of salt (7)

6 ___ it gently to warm the solution (4)

7 Turn from a liquid into a gas (9)

Down

1 It comes first in the name of the alkali used with hydrochloric acid (6)

2 Nitric acid makes this kind of salt (7)

3 Hydrochloric acid makes this kind of salt (8)

4 Add alkali to the acid until it is this (7)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

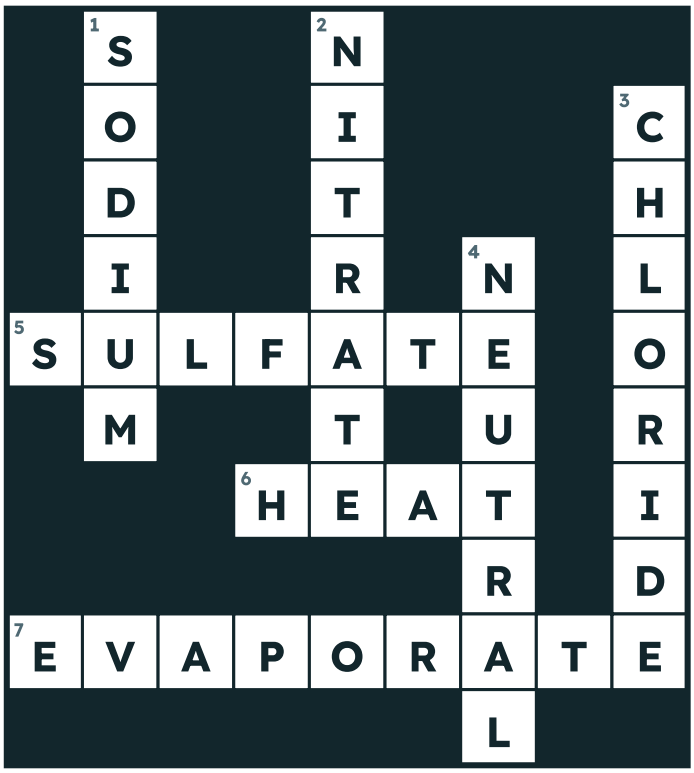
Lesson 5: Making a salt

Answers

Word search

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

Crossword



Across

5 Sulfate
Sulfuric acid makes this kind of salt (7)

6 Heat
___ it gently to warm the solution (4)

7 Evaporate
Turn from a liquid into a gas (9)

Down

1 Sodium
It comes first in the name of the alkali used with hydrochloric acid (6)

2 Nitrate
Nitric acid makes this kind of salt (7)

3 Chloride
Hydrochloric acid makes this kind of salt (8)

4 Neutral
Add alkali to the acid until it is this (7)

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 6

Acids and metals

Word search

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

Find these 8 words

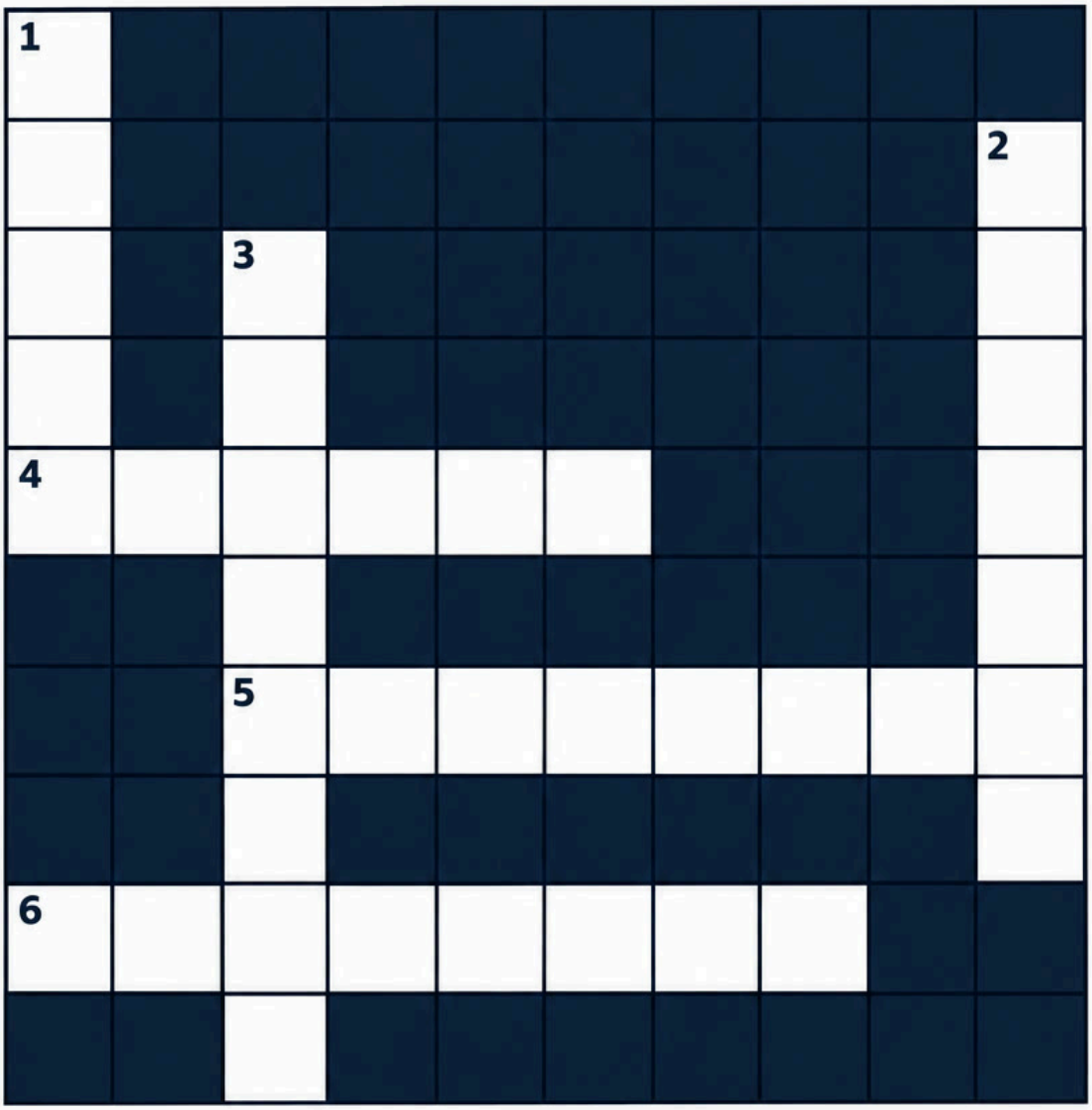
- ☐ BURNS
- ☐ CHLORIDE
- ☐ FIZZING
- ☐ HYDROGEN
- ☐ MAGNESIUM
- ☐ REACTION
- ☐ SPLINT
- ☐ SQUEAKY

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 6

Acids and metals

Crossword



Across

4 A thin stick that is lit and held in a gas to test it (6)

5 A change that makes new substances (8)

6 The gas made when a metal reacts with an acid (8)

Down

1 Gas that ___ with a pop (5)

2 What you see as gas bubbles rise in the acid (7)

3 Hydrochloric acid always makes this kind of salt (8)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

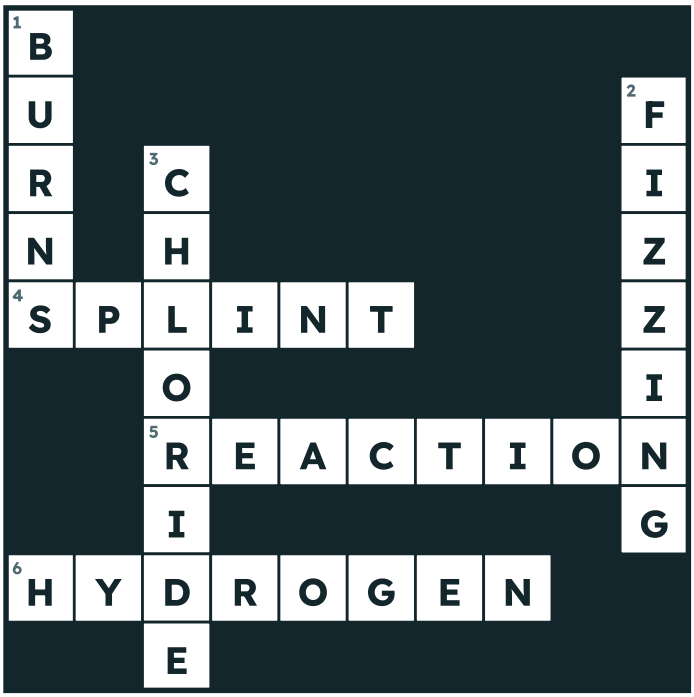
Lesson 6: Acids and metals

Answers

Word search

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

Crossword



Across

4 Splint
A thin stick that is lit and held in a gas to test it (6)

5 Reaction
A change that makes new substances (8)

6 Hydrogen
The gas made when a metal reacts with an acid (8)

Down

1 Burns
Gas that ___ with a pop (5)

2 Fizzing
What you see as gas bubbles rise in the acid (7)

3 Chloride
Hydrochloric acid always makes this kind of salt (8)

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 7

Using neutralisation

Word search

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

Find these 8 words

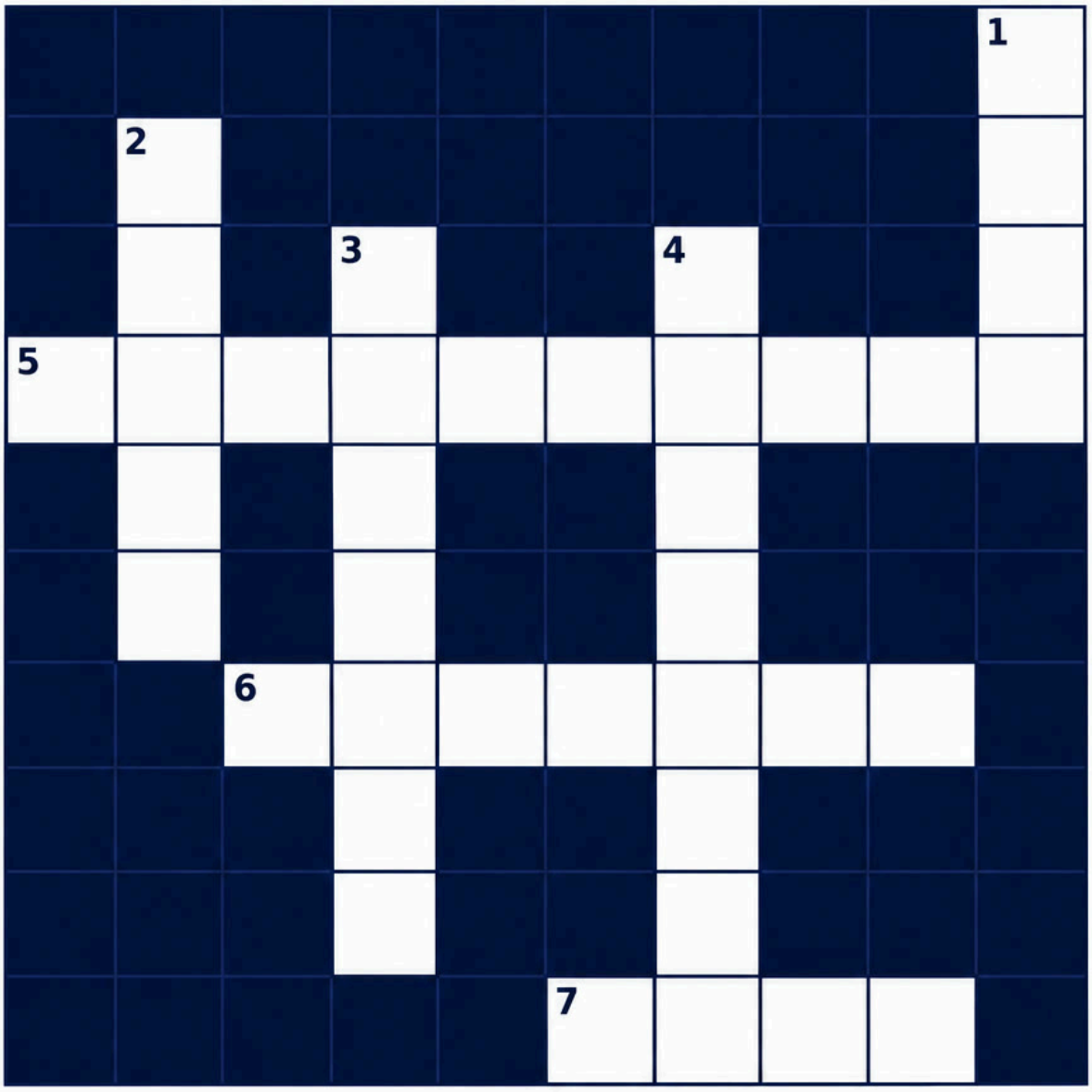
- ☐ BASE
- ☐ CROPS
- ☐ FARMERS
- ☐ INDIGESTION
- ☐ LIME
- ☐ STOMACH
- ☐ TABLET
- ☐ TOOTHPASTE

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

KS3 CHEMISTRY · ACIDS AND ALKALIS · LESSON 7

Using neutralisation

Crossword



Across

5 Squeezed onto a brush to clean your mouth (10)

6 People who spread a treatment on acidic fields (7)

7 The general name for a substance that neutralises an acid (4)

Down

1 Spread on fields to make the ground less acidic (4)

2 Plants grown for food in fields (5)

3 Where acid helps digest food (7)

4 The kind of microbe in your mouth that makes acid (8)

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

KS3 SCIENCE · CHEMISTRY · ACIDS AND ALKALIS

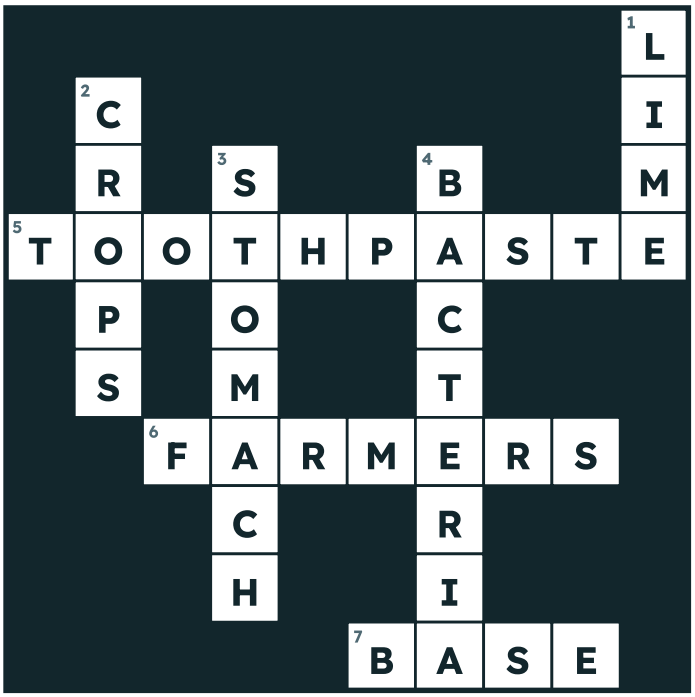
Lesson 7: Using neutralisation

Answers

Word search



Crossword



Across

5 Toothpaste
Squeezed onto a brush to clean your mouth (10)

6 Farmers
People who spread a treatment on acidic fields (7)

7 Base
The general name for a substance that neutralises an acid (4)

Down

1 Lime
Spread on fields to make the ground less acidic (4)

2 Crops
Plants grown for food in fields (5)

3 Stomach
Where acid helps digest food (7)

4 Bacteria
The kind of microbe in your mouth that makes acid (8)

In the word search, words go across, down or diagonally, and spaces are left out. The same puzzles can be played on the Acids and alkalis lesson 7 page of the KS3 Science revision site.