KS3 SCIENCE • BIOLOGY

Photosynthesis

Word search

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

Find these 10 words

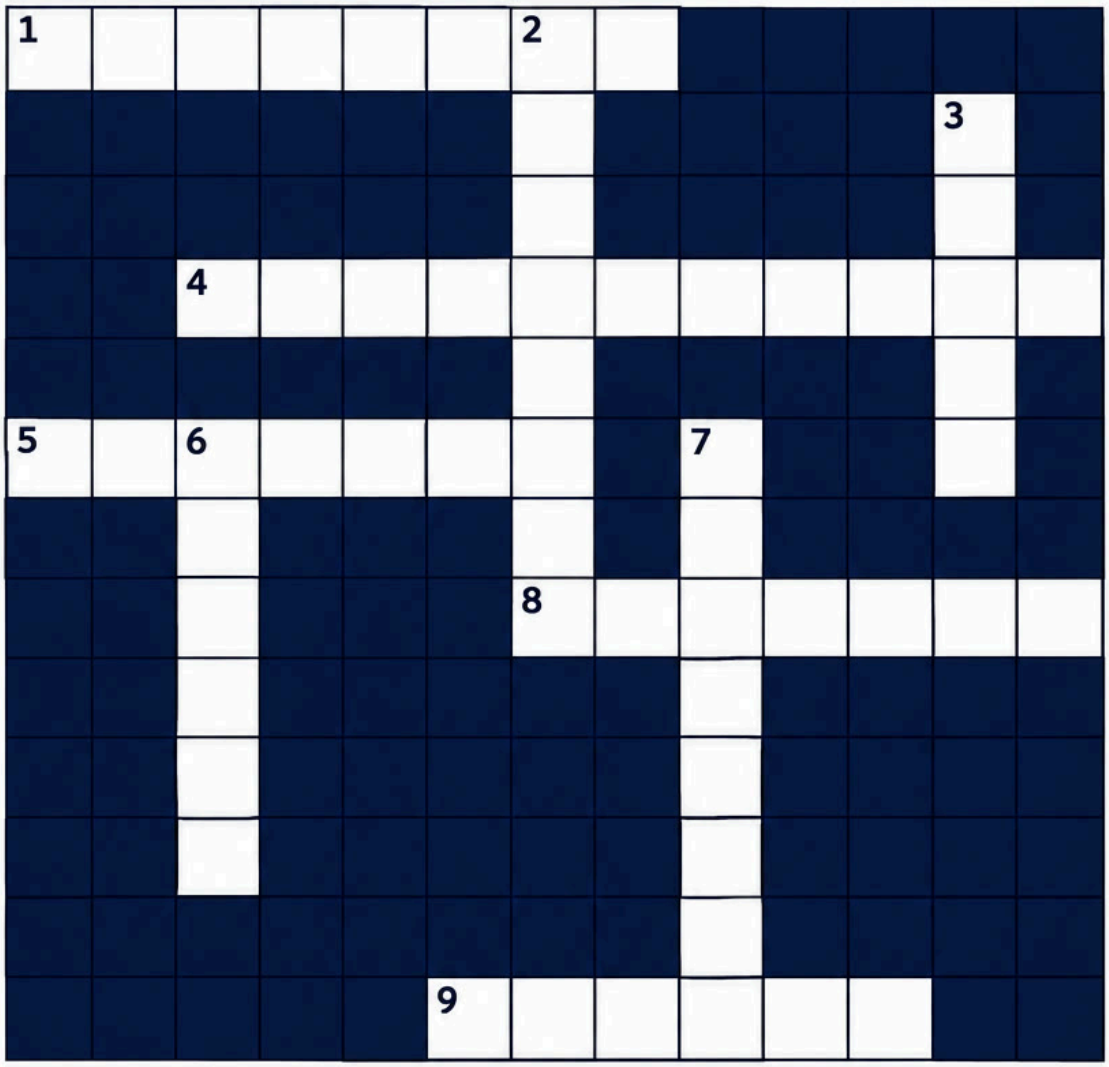
- ☐ CHLOROPHYLL
- ☐ GLUCOSE
- ☐ GUARD CELLS
- ☐ NITRATES
- ☐ OXYGEN
- ☐ PALISADE CELL
- ☐ PRODUCT
- ☐ REACTANT
- ☐ STARCH
- ☐ XYLEM

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

KS3 SCIENCE • BIOLOGY

Photosynthesis

Crossword



Across

1 A substance that is used up in a chemical reaction (8)

4 The green substance that absorbs light (11)

5 A substance that is made in a chemical reaction (7)

8 Tiny pores in a leaf that let gases in and out (7)

9 A store of glucose in a plant (6)

Down

2 Minerals a plant needs to make proteins for growth (8)

3 Tubes that carry water up from the roots (5)

6 The gas given out in photosynthesis (6)

7 A living thing that makes its own food, at the start of a food chain (8)

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

KS3 SCIENCE · BIOLOGY

Photosynthesis

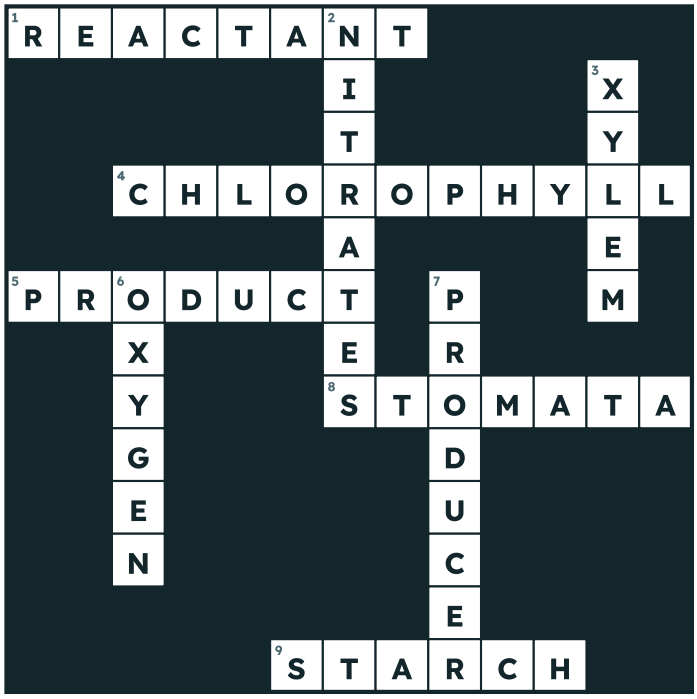
Answers

Word search



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

Crossword



Across

1 Reactant
A substance that is used up in a chemical reaction (8)

4 Chlorophyll
The green substance that absorbs light (11)

5 Product
A substance that is made in a chemical reaction (7)

8 Stomata
Tiny pores in a leaf that let gases in and out (7)

9 Starch
A store of glucose in a plant (6)

Down

2 Nitrates
Minerals a plant needs to make proteins for growth (8)

3 Xylem
Tubes that carry water up from the roots (5)

6 Oxygen
The gas given out in photosynthesis (6)

7 Producer
A living thing that makes its own food, at the start of a food chain (8)

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 1

How plants make food

Word search

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

Find these 8 words

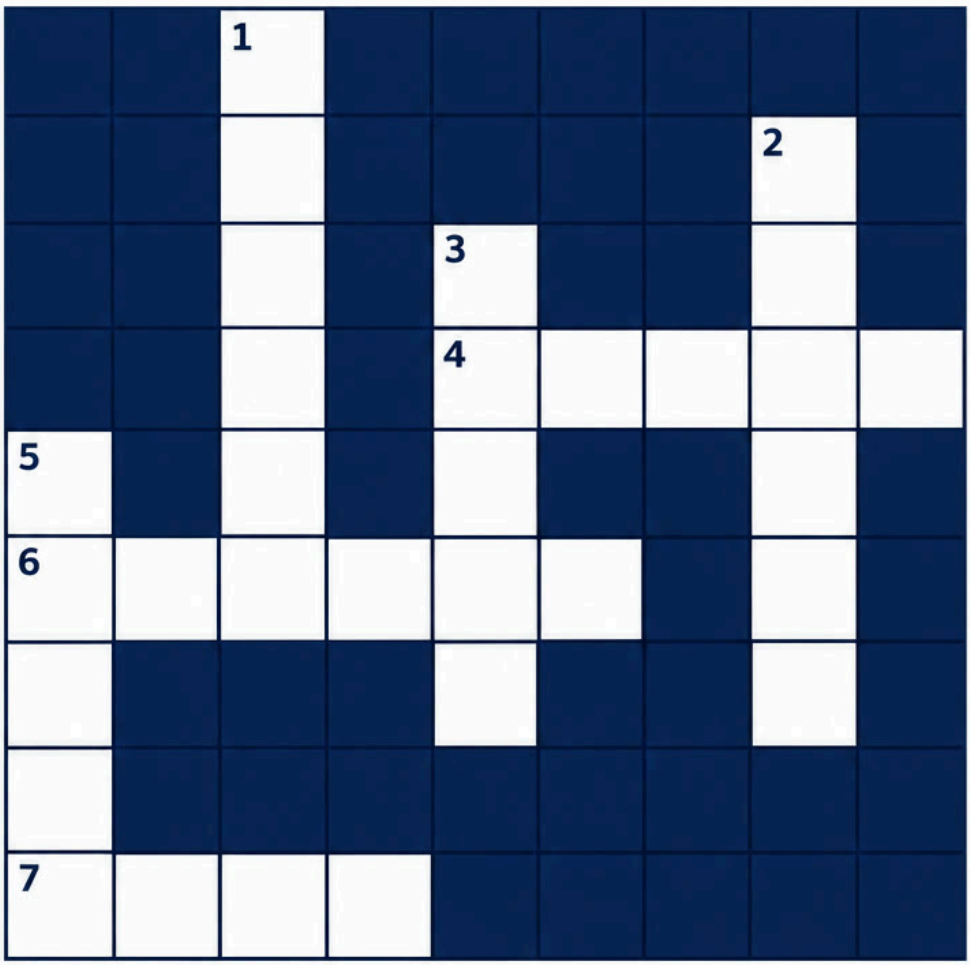
- ☐ CHLOROPHYLL
- ☐ CHLOROPLASTS
- ☐ ENERGY
- ☐ GLUCOSE
- ☐ OXYGEN
- ☐ ROOTS
- ☐ STARCH
- ☐ WATER

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 1

How plants make food

Crossword



Across

4 Living things other than plants that make their own food using light (5)

6 The gas given out when a plant makes food (6)

7 Earth that a plant grows in (4)

Down

1 Transferred from light, and used by the plant (6)

2 The store of food in plants that turns iodine solution blue-black (6)

3 A liquid that plants take in, with carbon dioxide, to make food (5)

5 The plant parts that take in liquid and minerals from the ground (5)

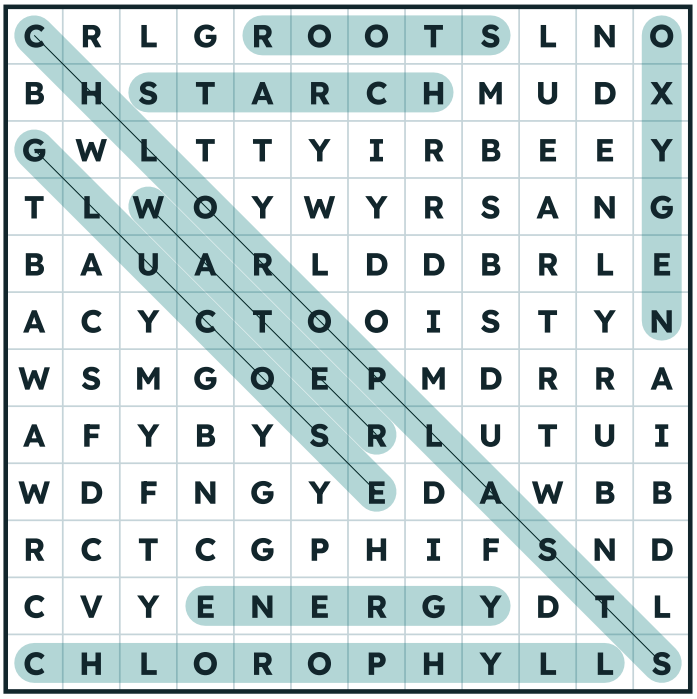
The number in brackets is how many letters the answer has.

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

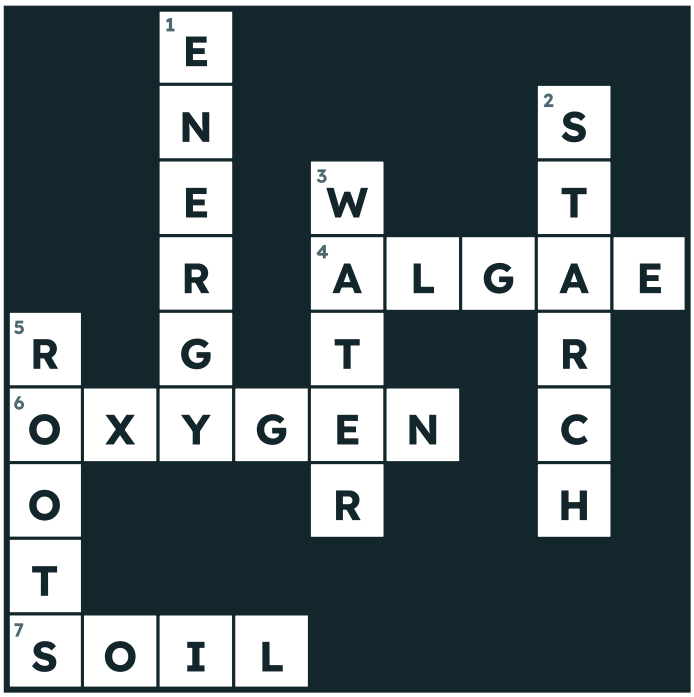
Lesson 1: How plants make food

Answers

Word search



Crossword



Across

4 Algae
Living things other than plants that make their own food using light (5)

6 Oxygen
The gas given out when a plant makes food (6)

7 Soil
Earth that a plant grows in (4)

Down

1 Energy
Transferred from light, and used by the plant (6)

2 Starch
The store of food in plants that turns iodine solution blue-black (6)

3 Water
A liquid that plants take in, with carbon dioxide, to make food (5)

5 Roots
The plant parts that take in liquid and minerals from the ground (5)

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 2

The word equation

Word search

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

Find these 8 words

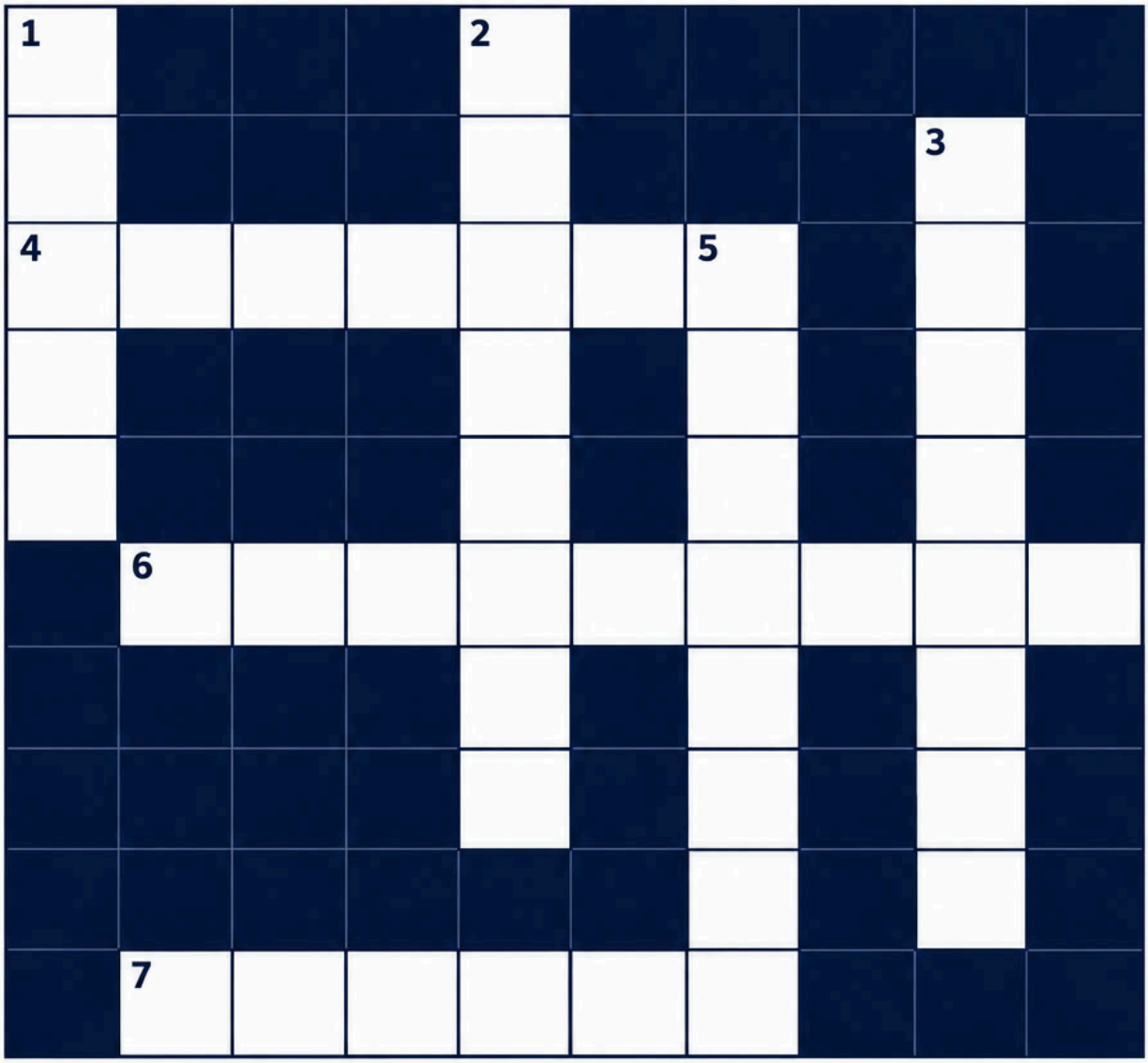
- ☐ ARROW
- ☐ CHLOROPHYLL
- ☐ EQUATION
- ☐ GLUCOSE
- ☐ OXYGEN
- ☐ PRODUCTS
- ☐ REACTANTS
- ☐ REACTION

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 2

The word equation

Crossword



Across

4 The sugar made in photosynthesis (7)

6 Substances that go in and are used up (9)

7 A gas given out in photosynthesis (6)

Down

1 Sunshine, for example (5)

2 Substances that come out and are made (8)

3 What happens when substances change into new ones (8)

5 It shows what goes in and what comes out, in words (8)

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

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

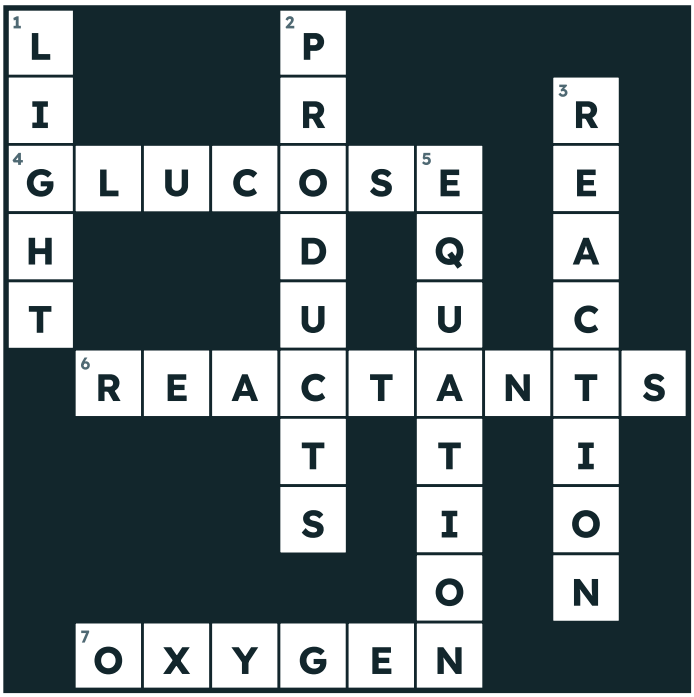
Lesson 2: The word equation

Answers

Word search



Crossword



Across

4 Glucose
The sugar made in photosynthesis (7)

6 Reactants
Substances that go in and are used up (9)

7 Oxygen
A gas given out in photosynthesis (6)

Down

1 Light
Sunshine, for example (5)

2 Products
Substances that come out and are made (8)

3 Reaction
What happens when substances change into new ones (8)

5 Equation
It shows what goes in and what comes out, in words (8)

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

KS3 BIOLOGY • PHOTOSYNTHESIS • LESSON 3

Leaves built for the job

Word search

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

Find these 8 words

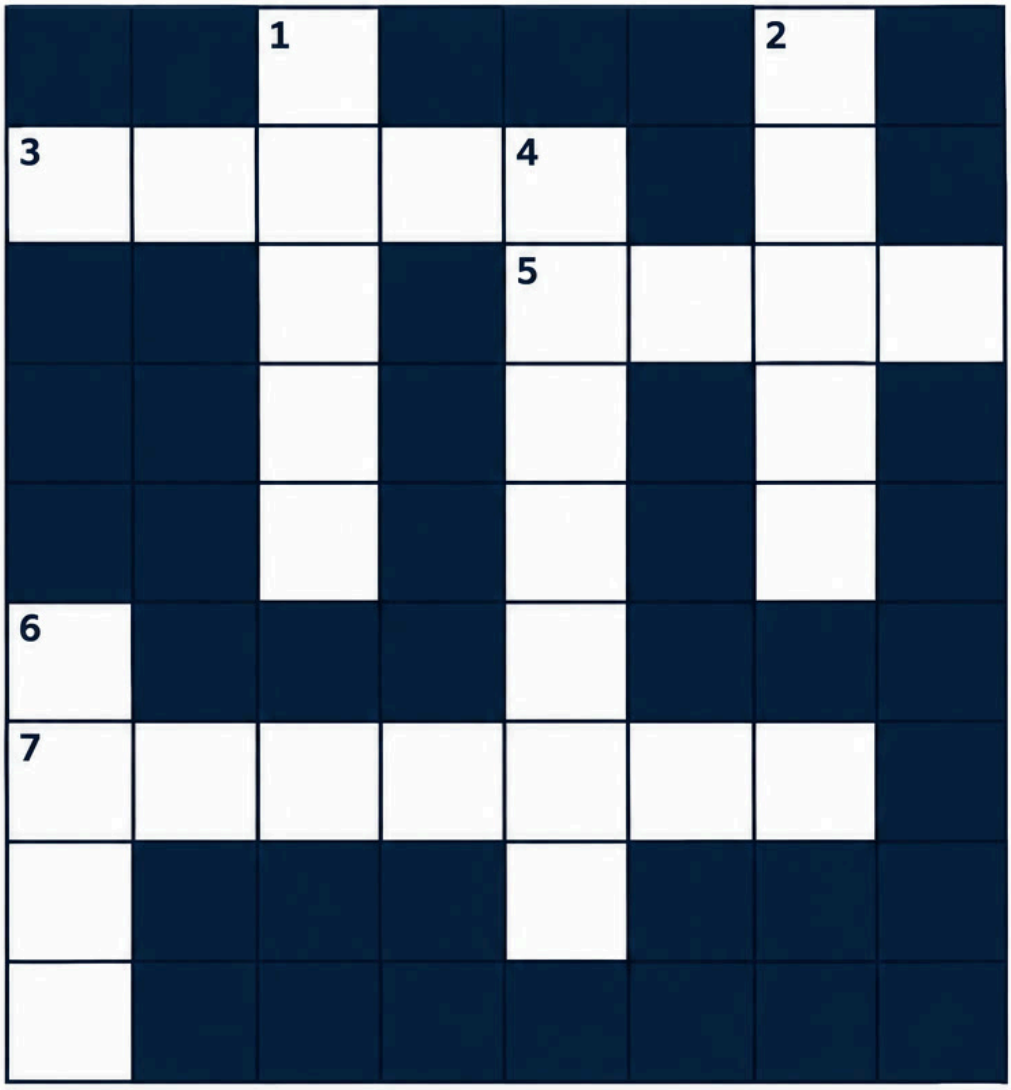
- ☐ ADAPTED
- ☐ CHLOROPHYLL
- ☐ GASES
- ☐ PORES
- ☐ STOMATA
- ☐ SURFACE AREA
- ☐ THIN
- ☐ WAXY

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 3

Leaves built for the job

Crossword



Across

3 Another word for the tiny holes in a leaf (5)

5 Not thick, so carbon dioxide has a short way to go (4)

7 A leaf is ___ for photosynthesis: it has features that help (7)

Down

1 Wide, so that a lot of light is caught (5)

2 Lines in a leaf that bring water to it (5)

4 Tiny openings in a leaf that let carbon dioxide in (7)

6 The kind of layer on top that stops the leaf losing too much water (4)

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

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

Lesson 3: Leaves built for the job

Answers

Word search



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

Crossword



Across

3 Pores
Another word for the tiny holes in a leaf (5)

5 Thin
Not thick, so carbon dioxide has a short way to go (4)

7 Adapted
A leaf is ___ for photosynthesis: it has features that help (7)

Down

1 Broad
Wide, so that a lot of light is caught (5)

2 Veins
Lines in a leaf that bring water to it (5)

4 Stomata
Tiny openings in a leaf that let carbon dioxide in (7)

6 Waxy
The kind of layer on top that stops the leaf losing too much water (4)

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

KS3 BIOLOGY • PHOTOSYNTHESIS • LESSON 4

Inside a leaf

Word search

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

Find these 8 words

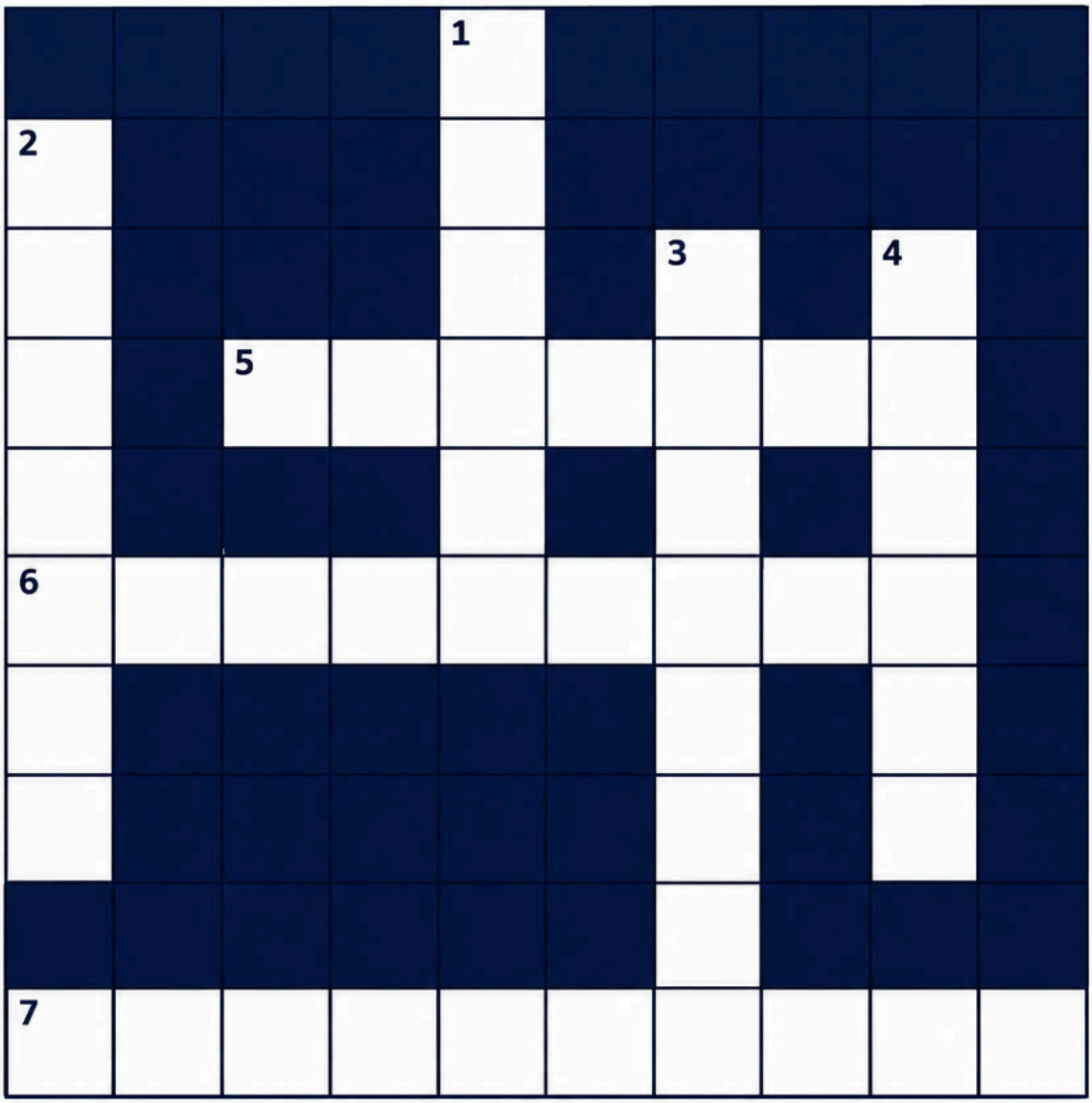
- ☐ CHLOROPLASTS
- ☐ DIFFUSE
- ☐ GUARD CELLS
- ☐ LAYERS
- ☐ PALISADE
- ☐ STOMATA
- ☐ UNDERSIDE
- ☐ VAPOUR

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 4

Inside a leaf

Crossword



Across

5 Tiny openings that let gases in and out of a leaf (7)

6 The bottom of the leaf, where most pores are (9)

7 The pair that opens and closes each pore (5,5)

Down

1 Water in the form of a gas (6)

2 What carbon dioxide does when it moves in through tiny openings (7)

3 ___ cell: a tall cell near the top of a leaf, where the light is brightest (8)

4 Cutting a slice through a leaf shows these, each with its own job (6)

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

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

Lesson 4: Inside a leaf

Answers

Word search



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

Crossword



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

Across

5 Stomata
Tiny openings that let gases in and out of a leaf (7)

6 Underside
The bottom of the leaf, where most pores are (9)

7 Guard cells
The pair that opens and closes each pore (5,5)

Down

1 Vapour
Water in the form of a gas (6)

2 Diffuse
What carbon dioxide does when it moves in through tiny openings (7)

3 Palisade
___ cell: a tall cell near the top of a leaf, where the light is brightest (8)

4 Layers
Cutting a slice through a leaf shows these, each with its own job (6)

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

KS3 BIOLOGY • PHOTOSYNTHESIS • LESSON 5

Water and minerals from roots

Word search

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

Find these 8 words

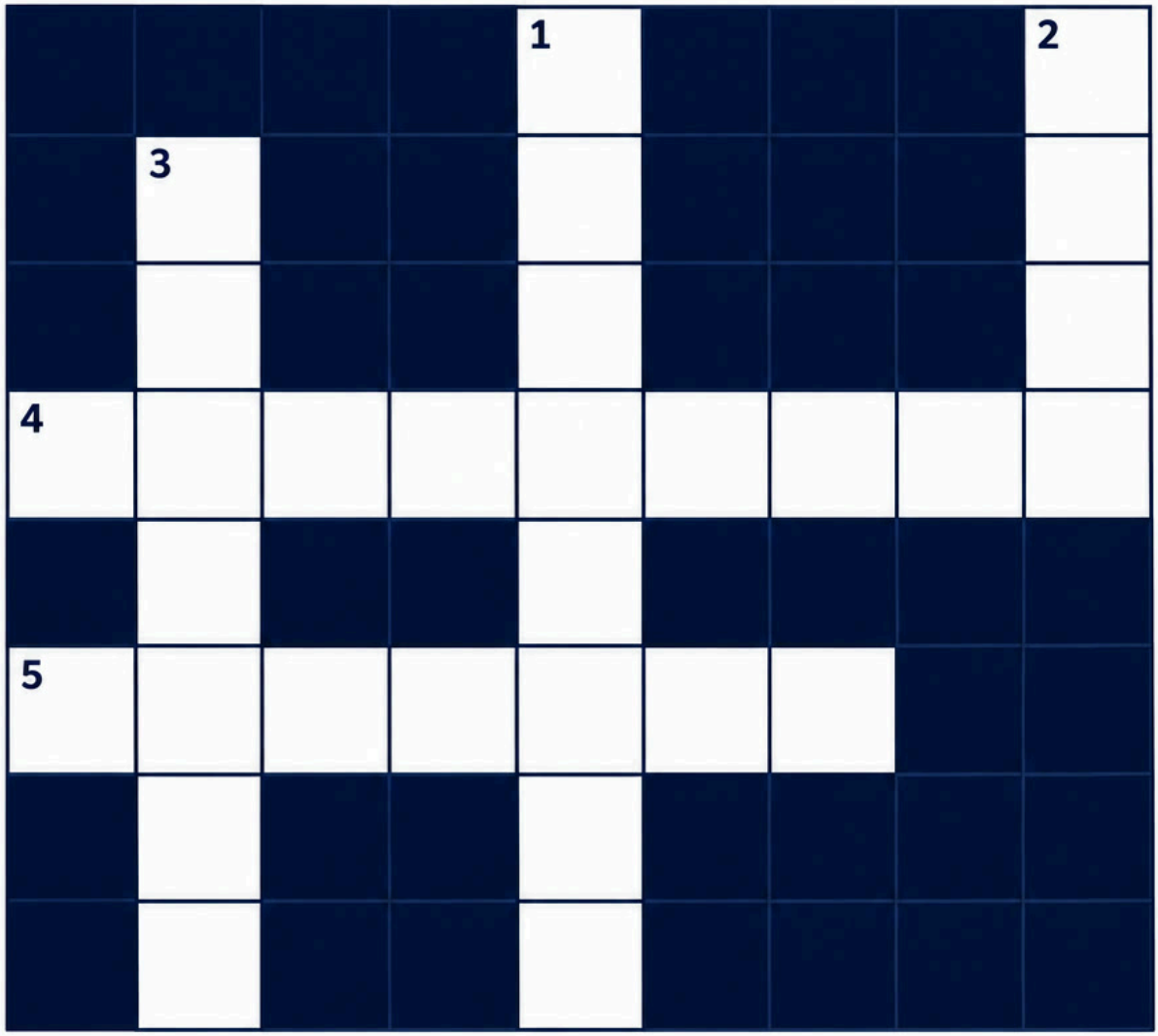
- ☐ HEALTHY
- ☐ MAGNESIUM
- ☐ NITRATES
- ☐ ROOT HAIR
- ☐ ROOTS
- ☐ STEM
- ☐ STOMATA
- ☐ XYLEM

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

KS3 BIOLOGY • PHOTOSYNTHESIS • LESSON 5

Water and minerals from roots

Crossword



Across

4 Needed to make the green substance in leaves (9)

5 Tiny pores in leaves that water vapour passes out through (7)

Down

1 The general name for substances in water that plants need in small amounts (8)

2 The main stalk that water travels up (4)

3 In good condition, not ill (7)

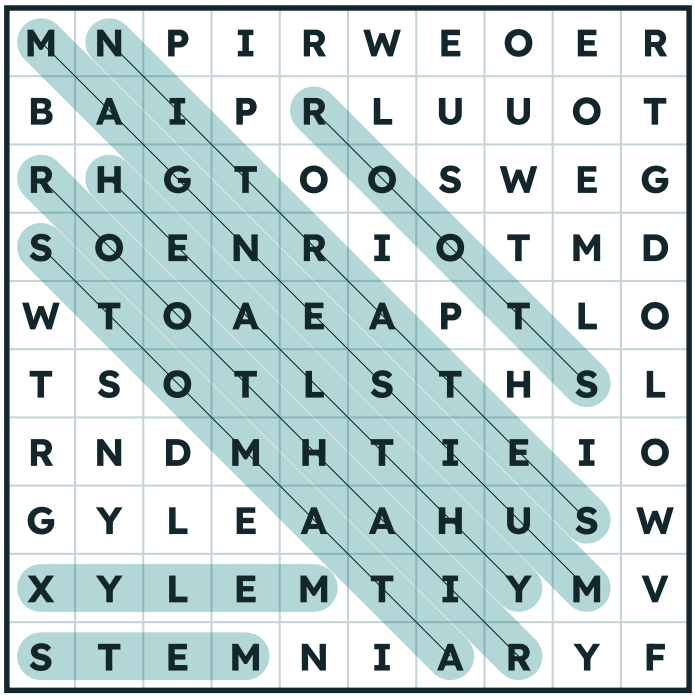
The number in brackets is how many letters the answer has.

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

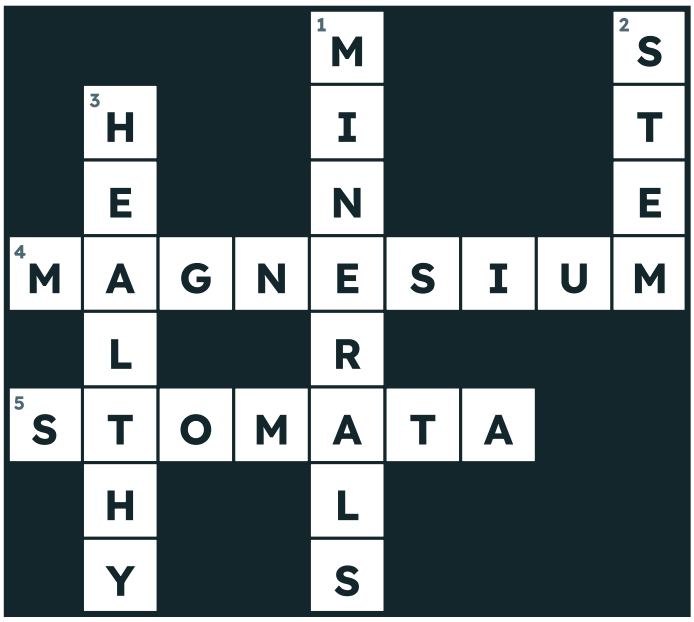
Lesson 5: Water and minerals from roots

Answers

Word search



Crossword



Across

4 Magnesium
Needed to make the green substance in leaves (9)

5 Stomata
Tiny pores in leaves that water vapour passes out through (7)

Down

1 Minerals
The general name for substances in water that plants need in small amounts (8)

2 Stem
The main stalk that water travels up (4)

3 Healthy
In good condition, not ill (7)

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 6

Why all life depends on it

Word search

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

Find these 8 words

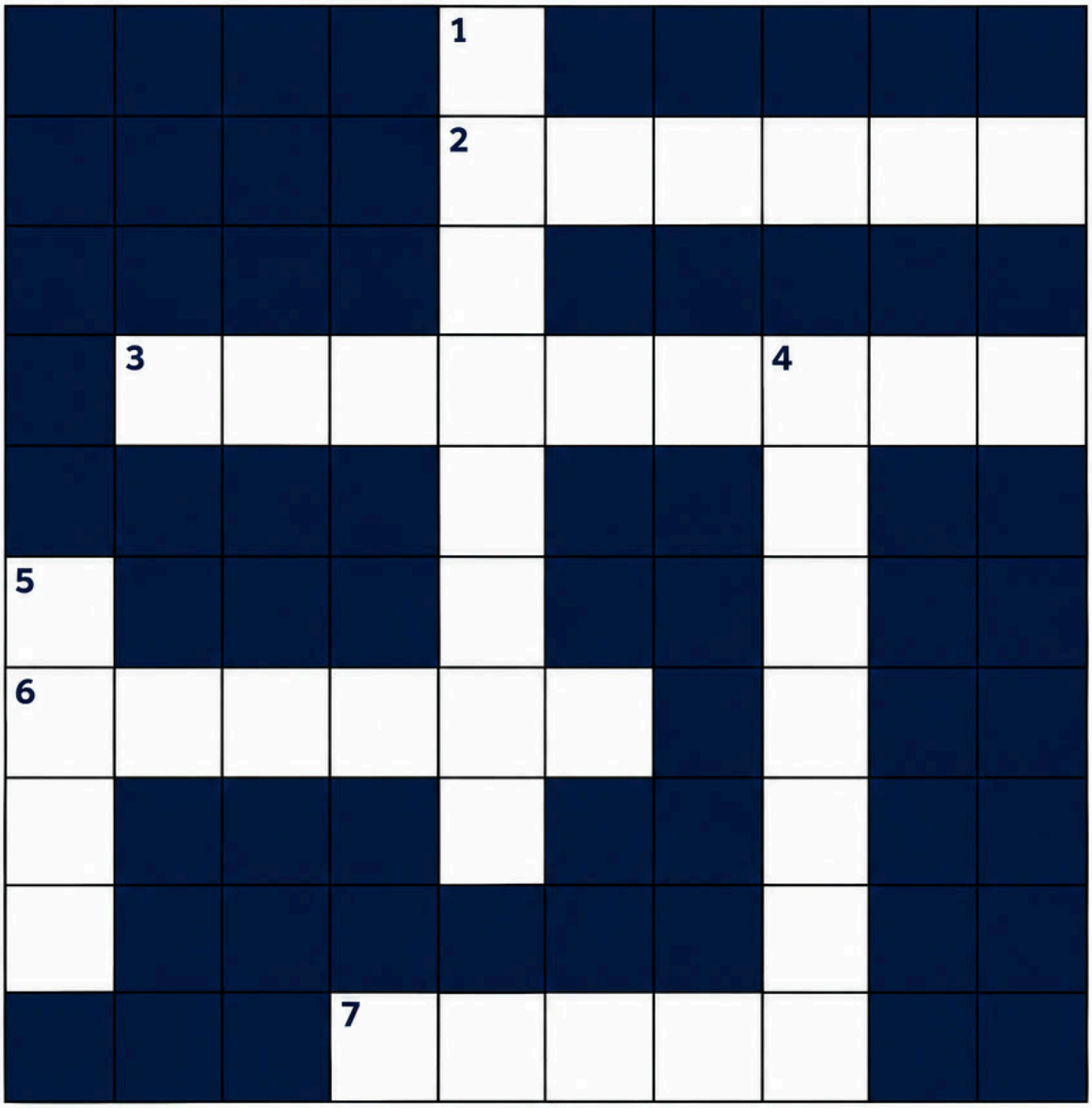
- ☐ ALGAE
- ☐ ANIMALS
- ☐ ENERGY
- ☐ OXYGEN
- ☐ POND
- ☐ PRODUCER
- ☐ RABBIT
- ☐ RESPIRATION

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

KS3 BIOLOGY · PHOTOSYNTHESIS · LESSON 6

Why all life depends on it

Crossword



Across

2 A furry wild animal with long ears and a short tail (6)

3 Arrows show what is eaten by what in this (4,5)

6 The gas that photosynthesis puts into the air (6)

7 A green plant that covers lawns and fields (5)

Down

1 A living thing that makes its own food (8)

4 Living things that cannot make food, and so must eat plants or each other (7)

5 A small area of still water, like one in a garden (4)

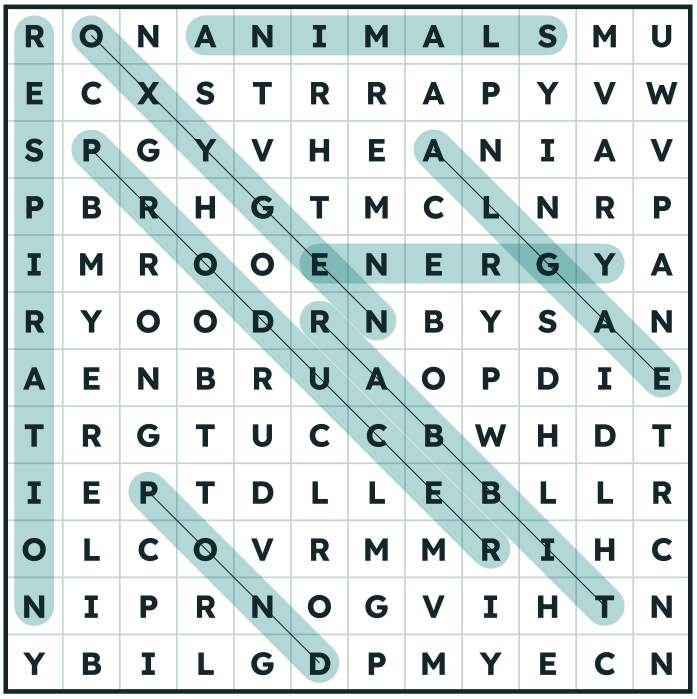
The number in brackets is how many letters the answer has.

KS3 SCIENCE · BIOLOGY · PHOTOSYNTHESIS

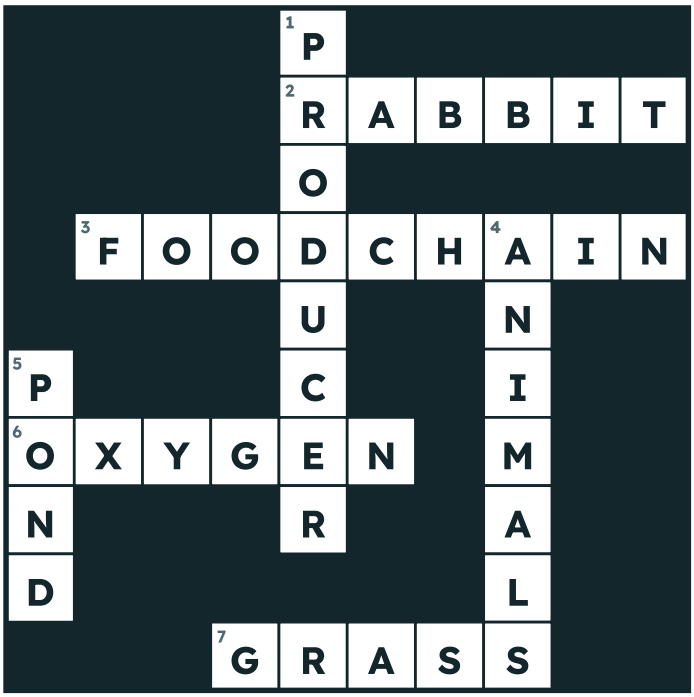
Lesson 6: Why all life depends on it

Answers

Word search



Crossword



Across

2 Rabbit
A furry wild animal with long ears and a short tail (6)

3 Food chain
Arrows show what is eaten by what in this (4,5)

6 Oxygen
The gas that photosynthesis puts into the air (6)

7 Grass
A green plant that covers lawns and fields (5)

Down

1 Producer
A living thing that makes its own food (8)

4 Animals
Living things that cannot make food, and so must eat plants or each other (7)

5 Pond
A small area of still water, like one in a garden (4)

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