KS3 SCIENCE · PHYSICS

Sound

Word search

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

Find these 10 words

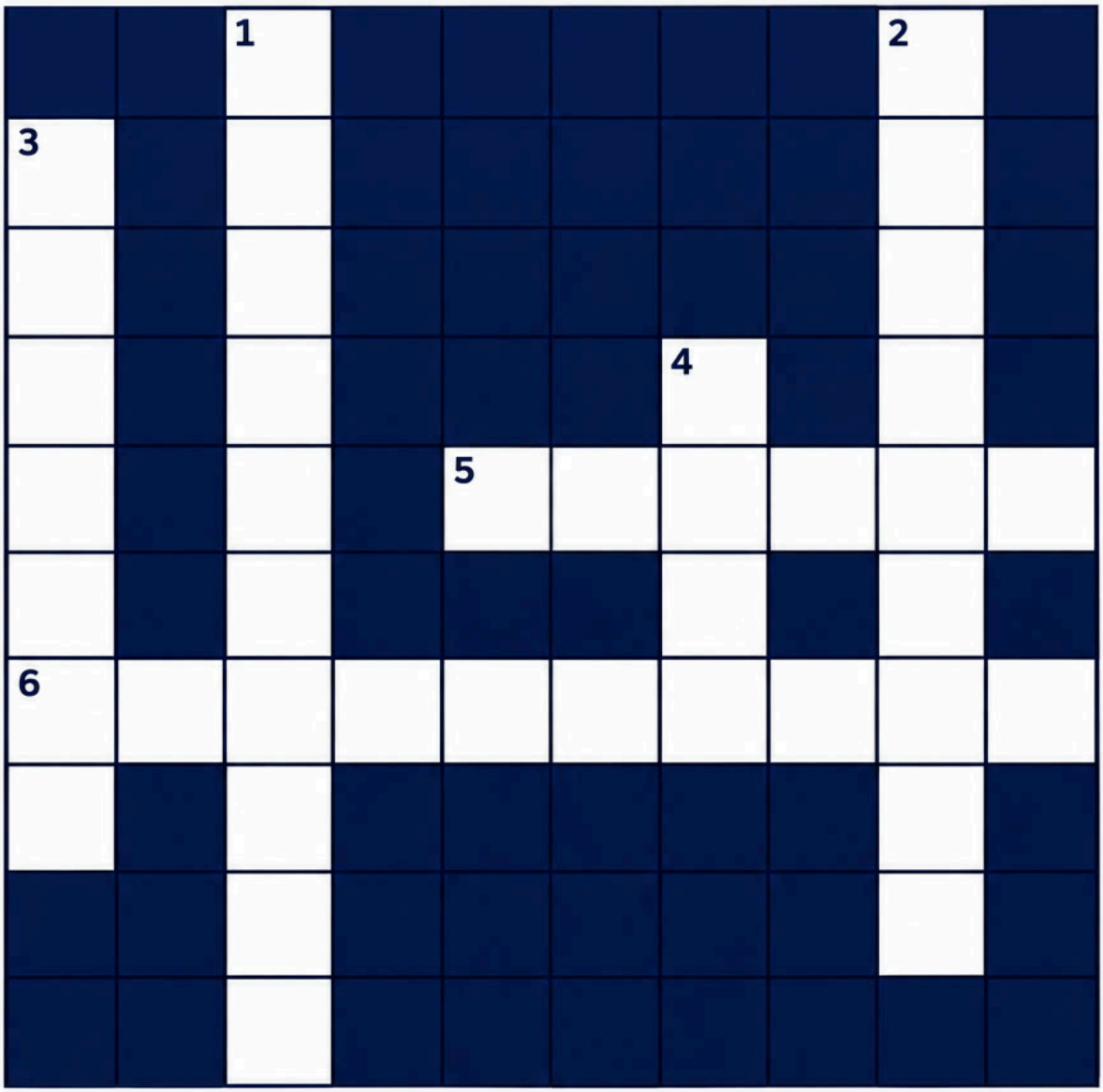
- ☐ ABSORPTION
- ☐ AMPLITUDE
- ☐ EAR DRUM
- ☐ ECHO
- ☐ FREQUENCY
- ☐ HEARING RANGE
- ☐ LOUDSPEAKER
- ☐ ULTRASOUND
- ☐ VACUUM
- ☐ VOLUME

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

KS3 SCIENCE · PHYSICS

Sound

Crossword



Across

5 A space with no particles in it (6)

6 Sound with a frequency too high for humans to hear (10)

Down

1 When the energy of a sound is transferred to a material (10)

2 The number of waves each second, in hertz (Hz) (9)

3 A thin skin in the ear that vibrates when sound reaches it (3,4)

4 A sound reflected back from a surface (4)

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

KS3 SCIENCE · PHYSICS

Sound

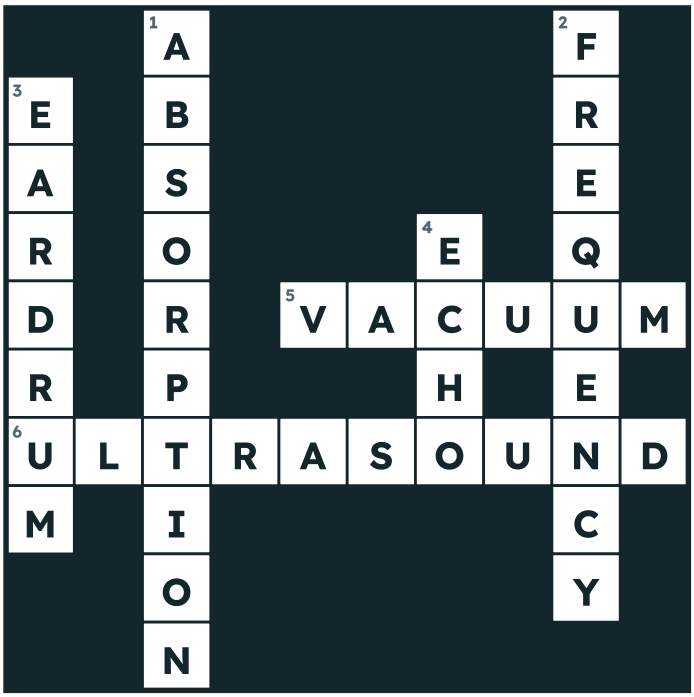
Answers

Word search



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

Crossword



Across

5 Vacuum
A space with no particles in it (6)

6 Ultrasound
Sound with a frequency too high for humans to hear (10)

Down

1 Absorption
When the energy of a sound is transferred to a material (10)

2 Frequency
The number of waves each second, in hertz (Hz) (9)

3 Ear drum
A thin skin in the ear that vibrates when sound reaches it (3,4)

4 Echo
A sound reflected back from a surface (4)

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

KS3 PHYSICS · SOUND · LESSON 1

Waves

Word search

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

Find these 8 words

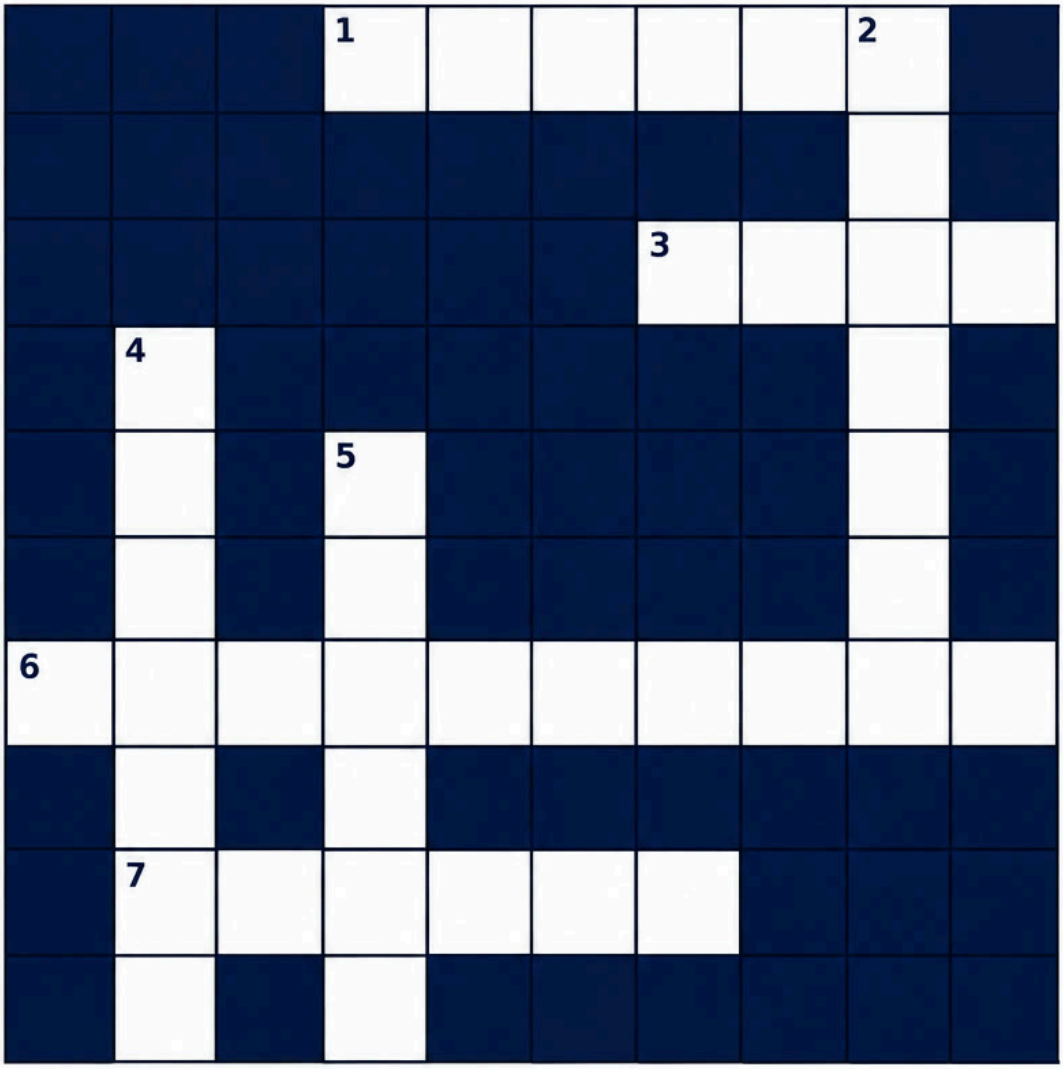
- ☐ BARRIER
- ☐ CANCEL
- ☐ ENERGY
- ☐ MATTER
- ☐ PEAK
- ☐ RIPPLES
- ☐ ROPE
- ☐ TROUGH

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

KS3 PHYSICS · SOUND · LESSON 1

Waves

Crossword



Across

1 The stuff that things are made of, which a wave does not carry (6)

3 A thick cord that you can shake up and down to make waves (4)

6 A wave whose vibration is at right angles to the way it travels (10)

7 What a wave carries from place to place (6)

Down

2 Circles spreading across a pond (7)

4 An obstacle that blocks the path of waves (7)

5 What two equal and opposite waves do when they meet: they ___ out (6)

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

KS3 SCIENCE · PHYSICS · SOUND

Lesson 1: Waves

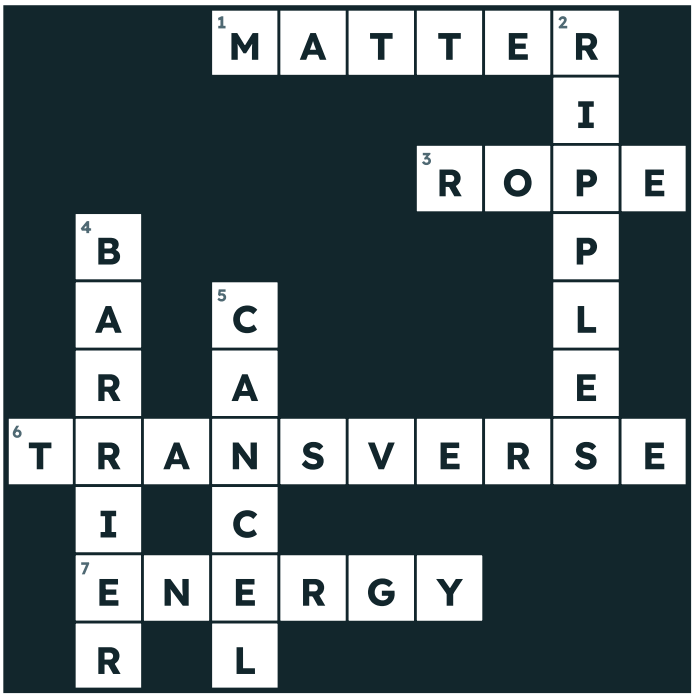
Answers

Word search



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

Crossword



Across

1 Matter
The stuff that things are made of, which a wave does not carry (6)

3 Rope
A thick cord that you can shake up and down to make waves (4)

6 Transverse
A wave whose vibration is at right angles to the way it travels (10)

7 Energy
What a wave carries from place to place (6)

Down

2 Ripples
Circles spreading across a pond (7)

4 Barrier
An obstacle that blocks the path of waves (7)

5 Cancel
What two equal and opposite waves do when they meet: they ___ 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 Sound lesson 1 page of the KS3 Science revision site.

KS3 PHYSICS · SOUND · LESSON 2

Making sound

Word search

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

Find these 8 words

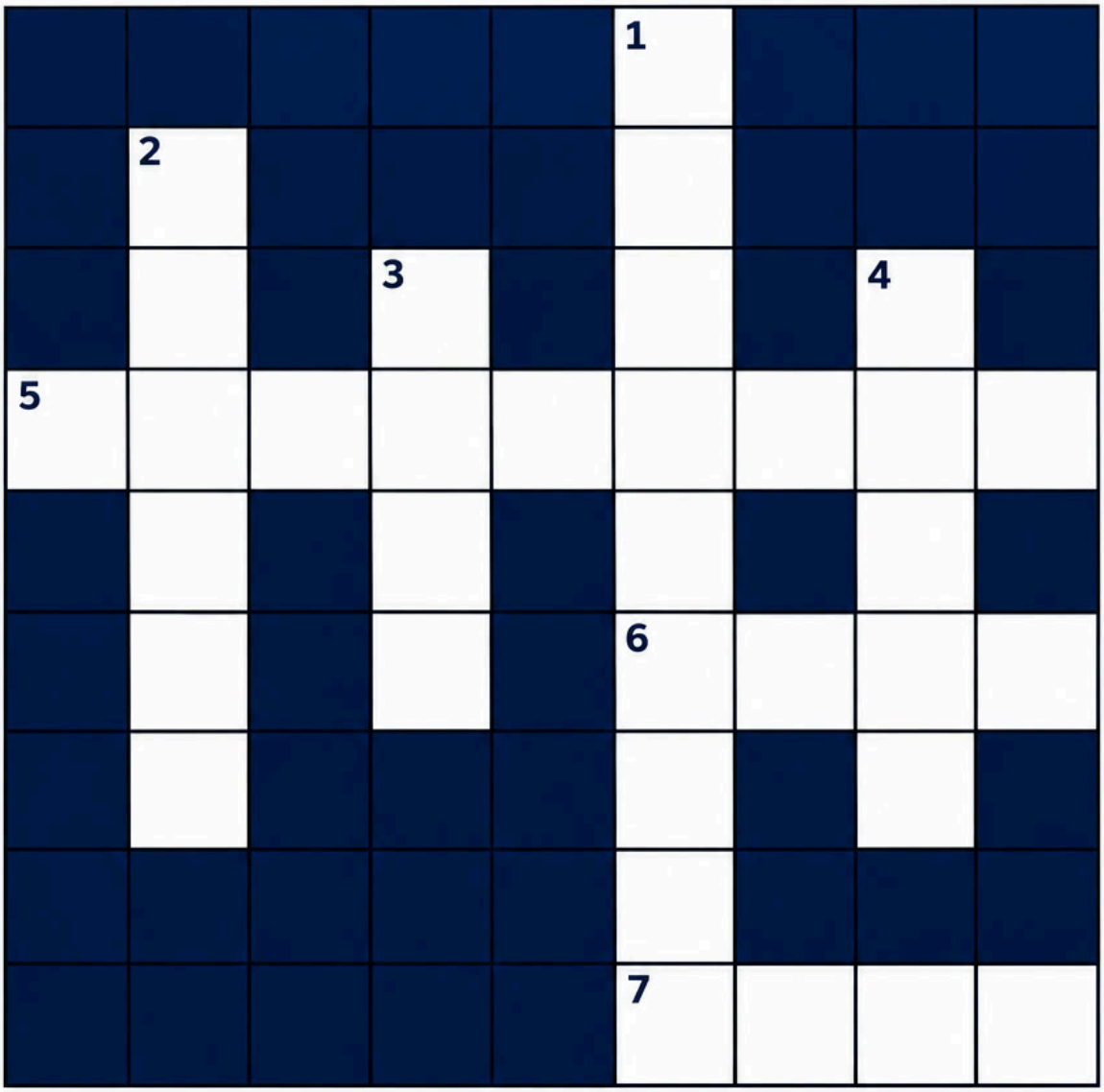
- ☐ CONE
- ☐ DRUM
- ☐ GUITAR
- ☐ LONGITUDINAL
- ☐ LOUDSPEAKER
- ☐ SKIN
- ☐ STRING
- ☐ VIBRATION

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

KS3 PHYSICS · SOUND · LESSON 2

Making sound

Crossword



Across

5 A back and forth movement that repeats (9)

6 A funnel-shaped part that moves back and forth in a speaker (4)

7 The stretched covering on top of an instrument you hit (4)

Down

1 Tiny pieces of air that push on their neighbours (9)

2 A musical instrument that you strum (6)

3 An instrument you hit with a stick; rice jumps on it (4)

4 What your ear hears (5)

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

KS3 SCIENCE · PHYSICS · SOUND

Lesson 2: Making sound

Answers

Word search

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

Crossword



Across

5 Vibration
A back and forth movement that repeats (9)

6 Cone
A funnel-shaped part that moves back and forth in a speaker (4)

7 Skin
The stretched covering on top of an instrument you hit (4)

Down

1 Particles
Tiny pieces of air that push on their neighbours (9)

2 Guitar
A musical instrument that you strum (6)

3 Drum
An instrument you hit with a stick; rice jumps on it (4)

4 Sound
What your ear hears (5)

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

KS3 PHYSICS · SOUND · LESSON 3

The speed of sound

Word search

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

Find these 8 words

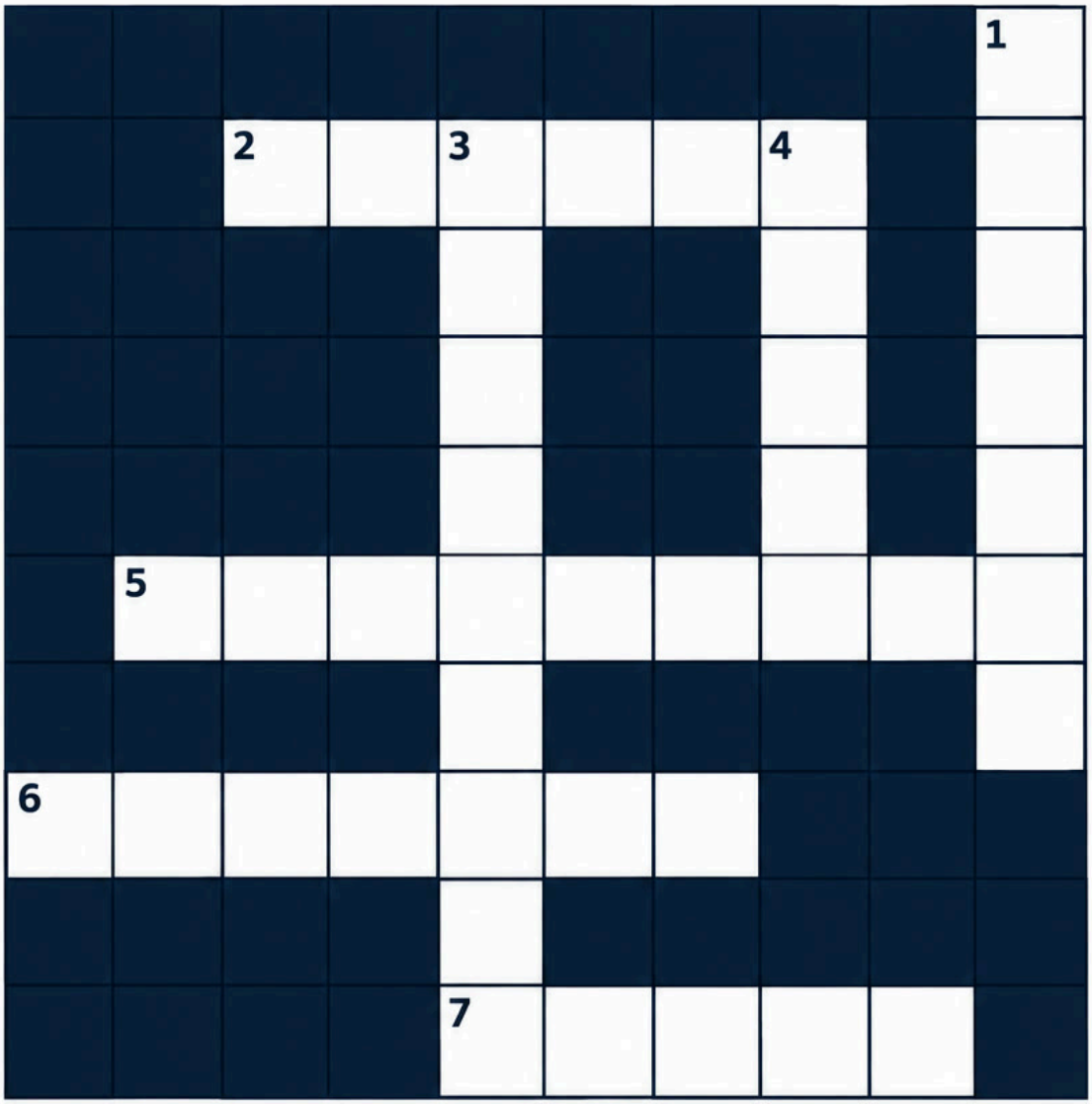
- ☐ GASES
- ☐ LIGHT
- ☐ LIQUIDS
- ☐ PARTICLES
- ☐ SOLIDS
- ☐ STEEL
- ☐ THUNDER
- ☐ VACUUM

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

KS3 PHYSICS · SOUND · LESSON 3

The speed of sound

Crossword



Across

2 Of the three states of matter, these usually let sound travel most quickly (6)

5 Tiny pieces that pass the vibration on (9)

6 Water is one of these (7)

7 Air is one of these (5)

Down

1 Quickest of all (7)

3 The bright flash in a storm, seen before the rumble (9)

4 A metal in which sound travels at about 5000 m/s (5)

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

KS3 SCIENCE · PHYSICS · SOUND

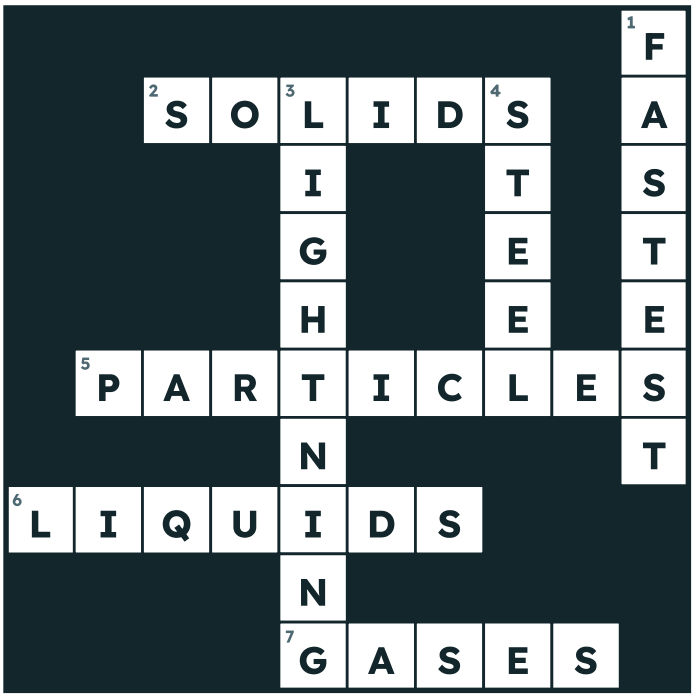
Lesson 3: The speed of sound

Answers

Word search



Crossword



Across

2 Solids
Of the three states of matter, these usually let sound travel most quickly (6)

5 Particles
Tiny pieces that pass the vibration on (9)

6 Liquids
Water is one of these (7)

7 Gases
Air is one of these (5)

Down

1 Fastest
Quickest of all (7)

3 Lightning
The bright flash in a storm, seen before the rumble (9)

4 Steel
A metal in which sound travels at about 5000 m/s (5)

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

KS3 PHYSICS · SOUND · LESSON 4

Loudness and pitch

Word search

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

Find these 8 words

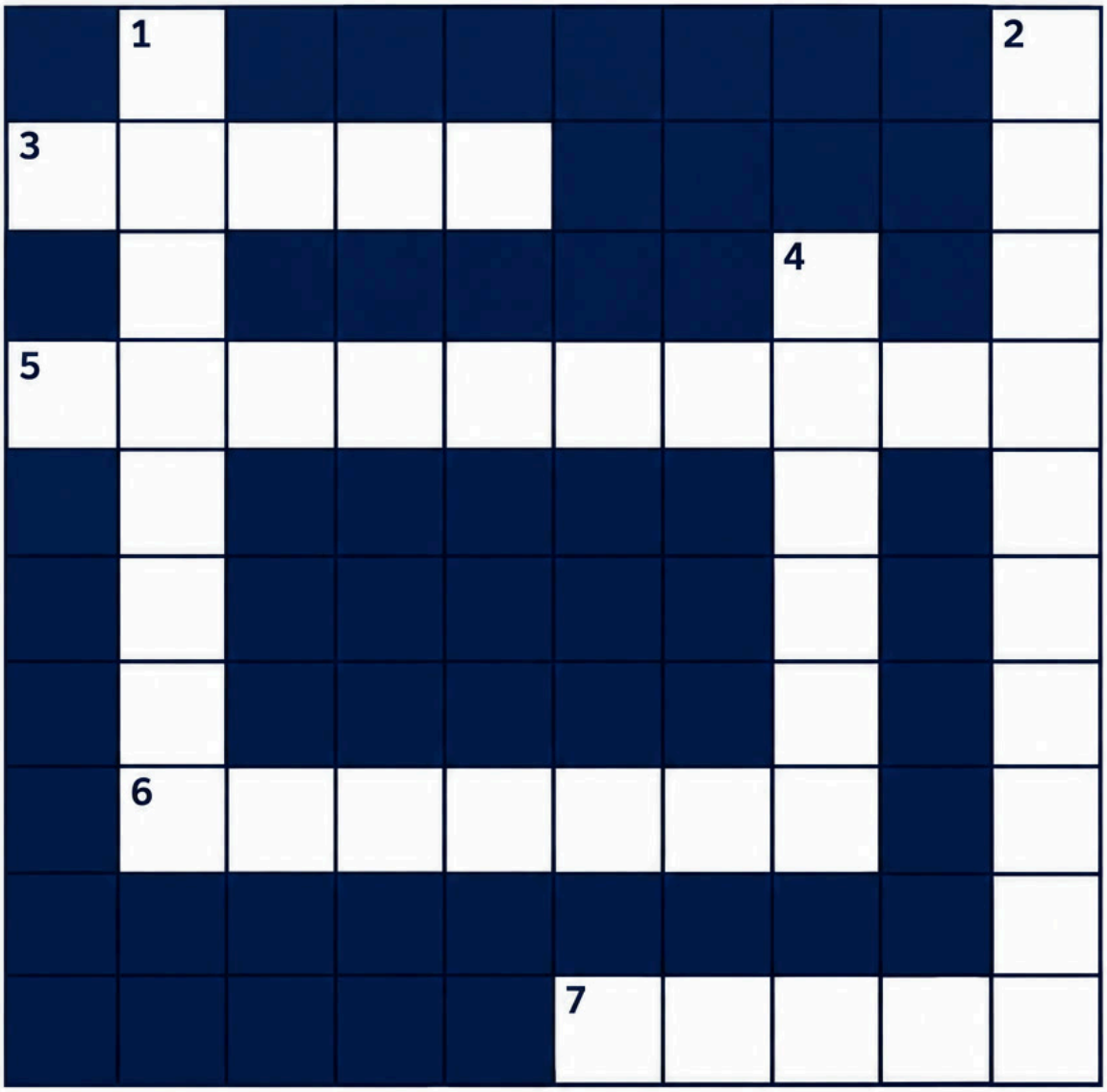
- ☐ AMPLITUDE
- ☐ DECIBELS
- ☐ HERTZ
- ☐ MICROPHONE
- ☐ OSCILLOSCOPE
- ☐ PITCH
- ☐ SHORTER
- ☐ WAVELENGTH

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

KS3 PHYSICS · SOUND · LESSON 4

Loudness and pitch

Crossword



Across

3 The unit that counts waves each second, written Hz (5)

5 Turns sound into an electrical signal for the screen (10)

6 In one material, more waves a second make the distance between peaks ___ (7)

7 How high or low a sound is (5)

Down

1 Units for how loud a sound is, written dB (8)

2 The distance from one peak to the next (10)

4 A bigger height of wave makes a sound ___ (6)

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

KS3 SCIENCE · PHYSICS · SOUND

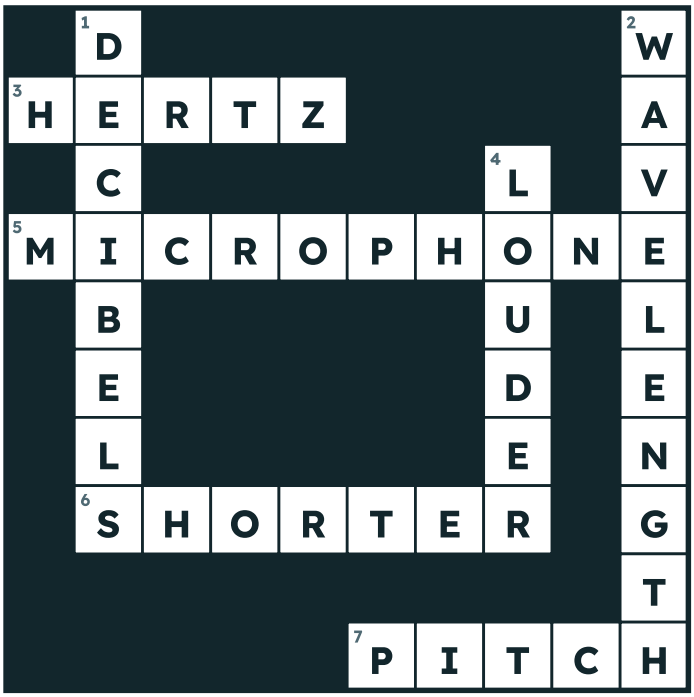
Lesson 4: Loudness and pitch

Answers

Word search

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

Crossword



Across

3 Hertz
The unit that counts waves each second, written Hz (5)

5 Microphone
Turns sound into an electrical signal for the screen (10)

6 Shorter
In one material, more waves a second make the distance between peaks ___ (7)

7 Pitch
How high or low a sound is (5)

Down

1 Decibels
Units for how loud a sound is, written dB (8)

2 Wavelength
The distance from one peak to the next (10)

4 Louder
A bigger height of wave makes a sound ___ (6)

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

KS3 PHYSICS · SOUND · LESSON 5

Echoes

Word search

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

Find these 8 words

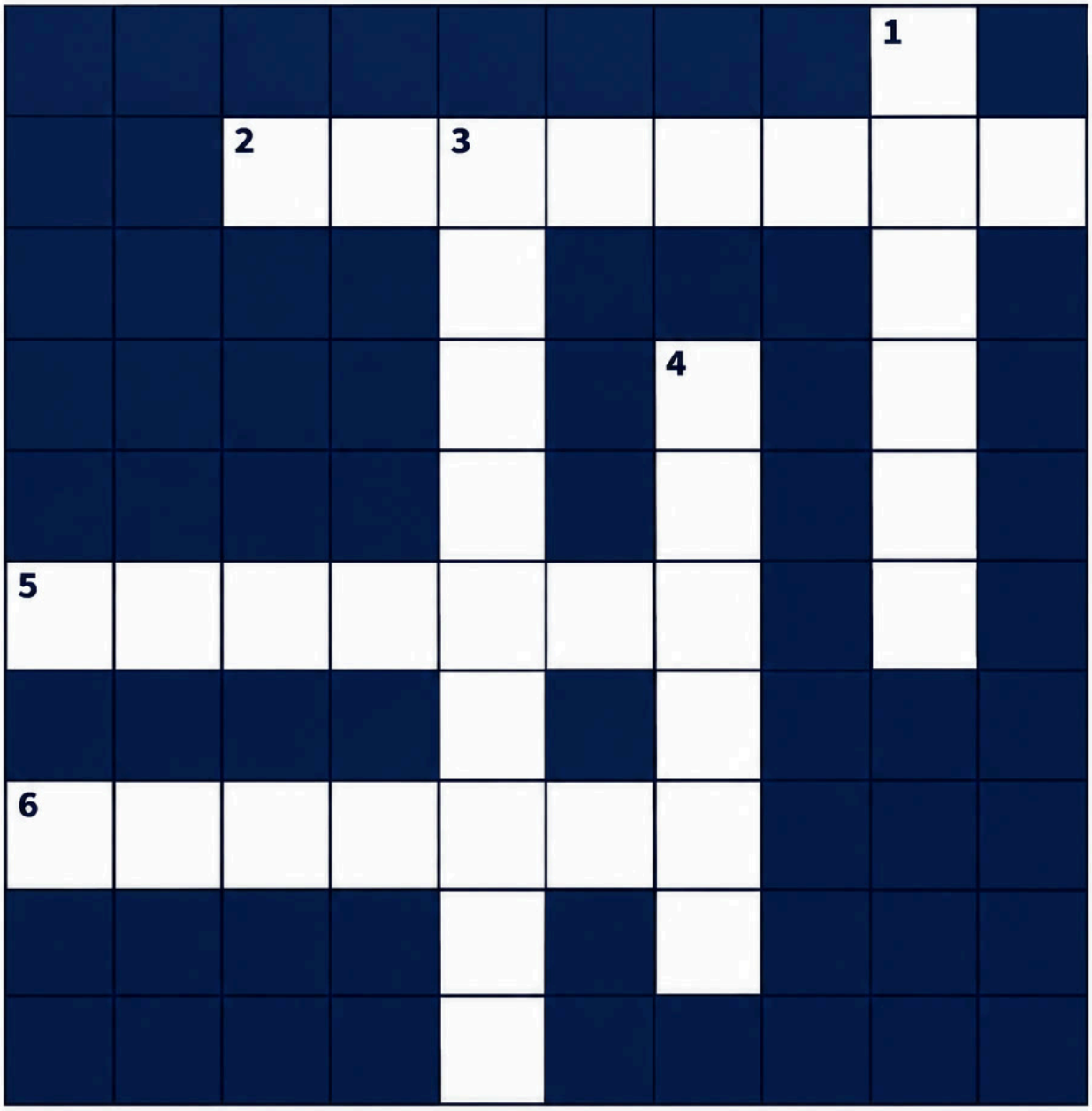
- ☐ ABSORB
- ☐ CARPETS
- ☐ CLIFFS
- ☐ CUSHIONS
- ☐ ECHO
- ☐ ENERGY
- ☐ QUIETER
- ☐ REFLECTED

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

KS3 PHYSICS • SOUND • LESSON 5

Echoes

Crossword



Across

2 Soft cloth hung at windows (8)

5 Soft coverings for floors (7)

6 Soft surfaces make a room ___ (7)

Down

1 Soft materials take in this from the sound (6)

3 Bounced back off something hard (9)

4 Take in sound, as soft surfaces do (6)

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

KS3 SCIENCE · PHYSICS · SOUND

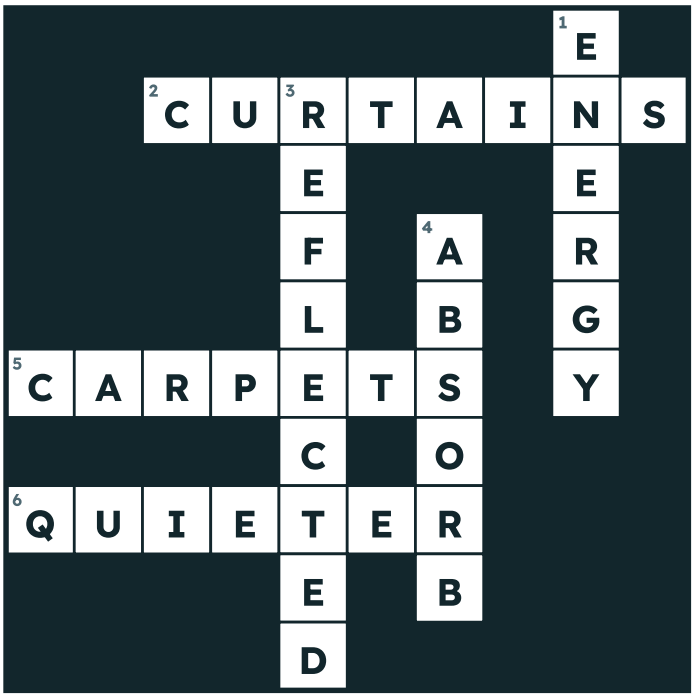
Lesson 5: Echoes

Answers

Word search



Crossword



Across

2 Curtains
Soft cloth hung at windows (8)

5 Carpets
Soft coverings for floors (7)

6 Quieter
Soft surfaces make a room ___ (7)

Down

1 Energy
Soft materials take in this from the sound (6)

3 Reflected
Bounced back off something hard (9)

4 Absorb
Take in sound, as soft surfaces do (6)

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

KS3 PHYSICS • SOUND • LESSON 6

Hearing

Word search

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

Find these 8 words

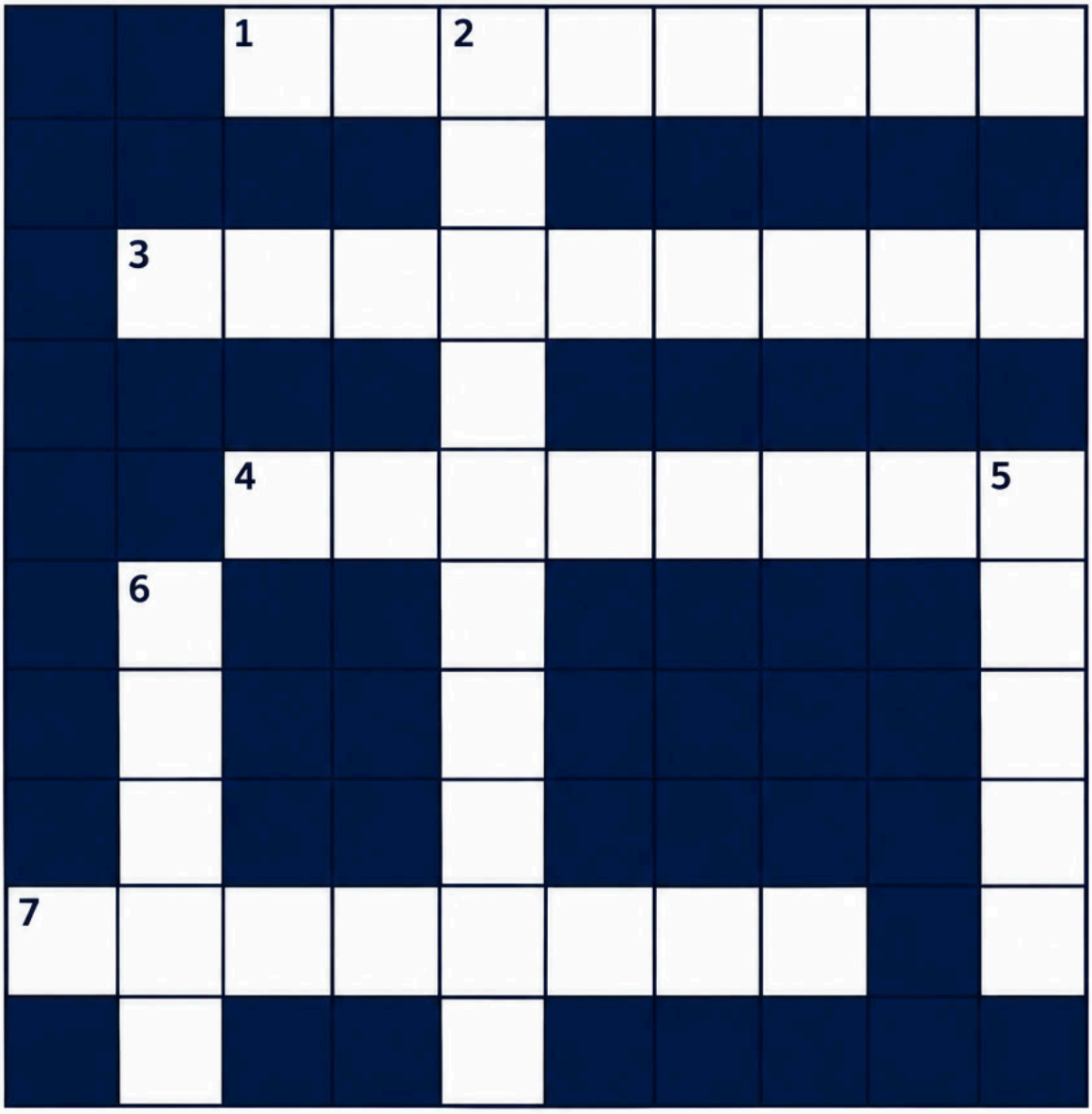
- ☐ BRAIN
- ☐ DAMAGE
- ☐ DETECTOR
- ☐ EAR DRUM
- ☐ PREDATOR
- ☐ RANGE
- ☐ SIGNALS
- ☐ VIBRATES

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

KS3 PHYSICS · SOUND · LESSON 6

Hearing

Crossword



Across

1 An animal that hunts others (8)

3 Worn over your ears to protect them near noisy machines (9)

4 Something that senses that sound is there (8)

7 Moves back and forth repeatedly, like the thin sheet inside a microphone (8)

Down

2 Describes the messages the ear makes from vibrations (10)

5 The usual human hearing ___ runs from about 20 Hz to 20 000 Hz (5)

6 The organ in your head that thinks (5)

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

KS3 SCIENCE · PHYSICS · SOUND

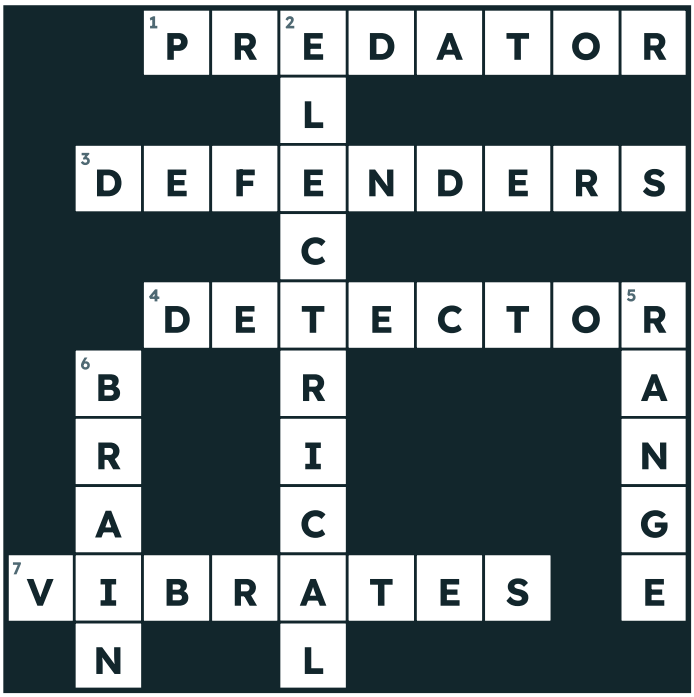
Lesson 6: Hearing

Answers

Word search



Crossword



Across

1 Predator
An animal that hunts others (8)

3 Defenders
Worn over your ears to protect them near noisy machines (9)

4 Detector
Something that senses that sound is there (8)

7 Vibrates
Moves back and forth repeatedly, like the thin sheet inside a microphone (8)

Down

2 Electrical
Describes the messages the ear makes from vibrations (10)

5 Range
The usual human hearing ___ runs from about 20 Hz to 20 000 Hz (5)

6 Brain
The organ in your head that thinks (5)

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

KS3 PHYSICS • SOUND • LESSON 7

Using sound

Word search

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

Find these 8 words

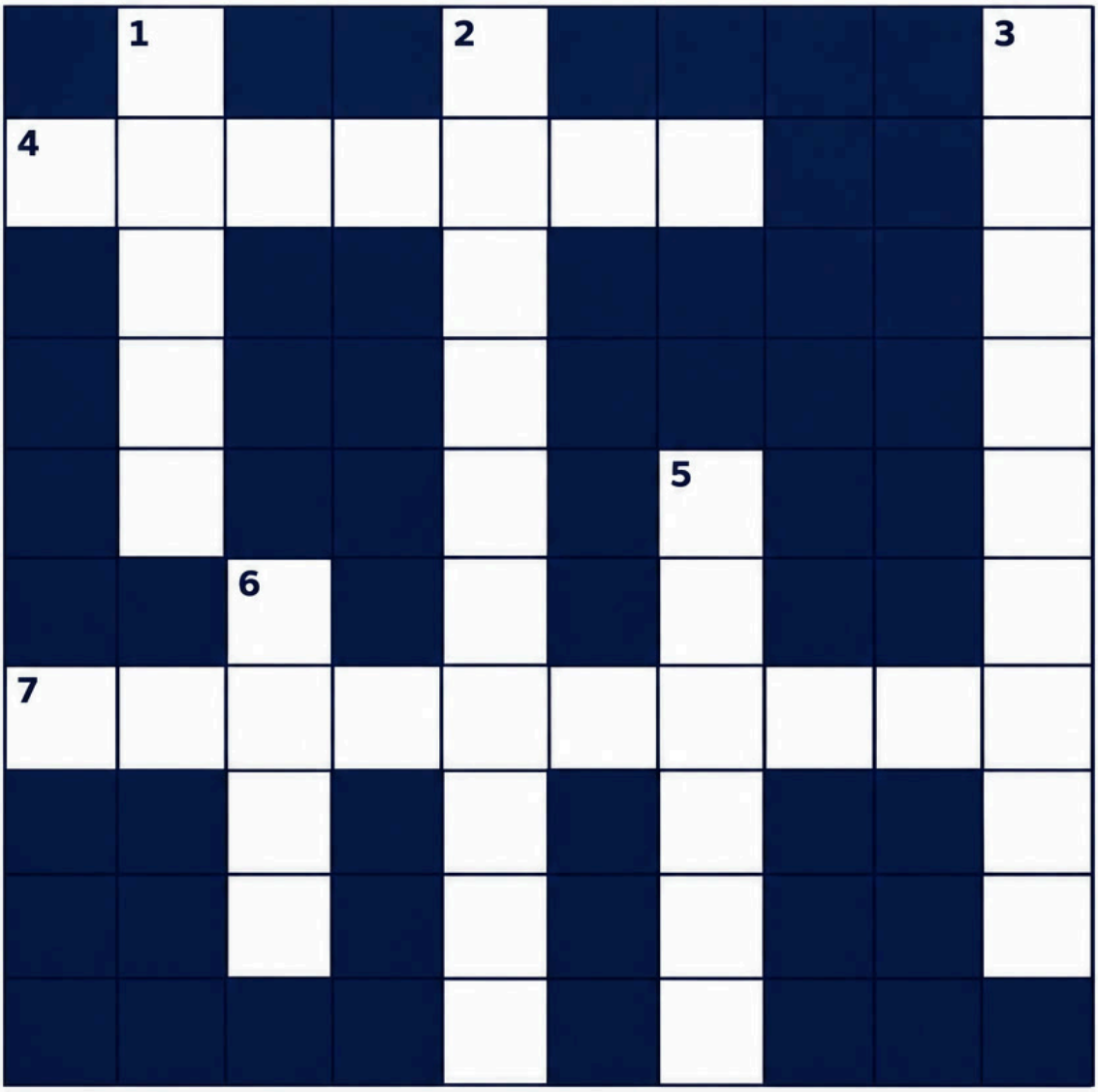
- ☐ BUBBLES
- ☐ ECHOES
- ☐ JEWELLERY
- ☐ LOUDSPEAKER
- ☐ SCAN
- ☐ SIGNAL
- ☐ SONAR
- ☐ ULTRASOUND

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

KS3 PHYSICS • SOUND • LESSON 7

Using sound

Crossword



Across

4 Tiny round pockets of gas that form and burst to clean (7)

7 A device that turns sound waves into electrical messages (10)

Down

1 A short burst of sound sent down by a ship (5)

2 Sound too high for us to hear (10)

3 Rings and necklaces, which can be cleaned by sound too high to hear (9)

5 Sounds that bounce back and are timed (6)

6 A check using very high-frequency sound to see a baby before birth (4)

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

KS3 SCIENCE · PHYSICS · SOUND

Lesson 7: Using sound

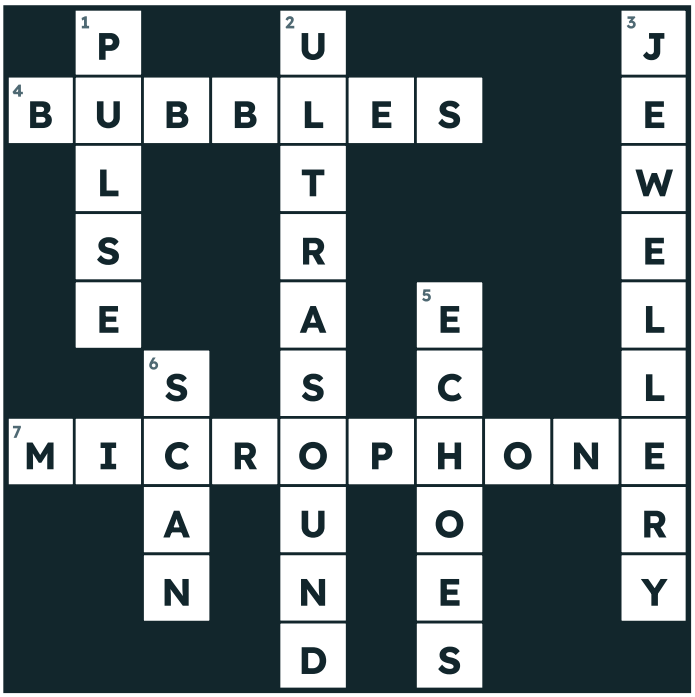
Answers

Word search



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

Crossword



Across

4 Bubbles
Tiny round pockets of gas that form and burst to clean (7)

7 Microphone
A device that turns sound waves into electrical messages (10)

Down

1 Pulse
A short burst of sound sent down by a ship (5)

2 Ultrasound
Sound too high for us to hear (10)

3 Jewellery
Rings and necklaces, which can be cleaned by sound too high to hear (9)

5 Echoes
Sounds that bounce back and are timed (6)

6 Scan
A check using very high-frequency sound to see a baby before birth (4)

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