KS3 SCIENCE · PHYSICS

Light

Word search

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

Find these 8 words

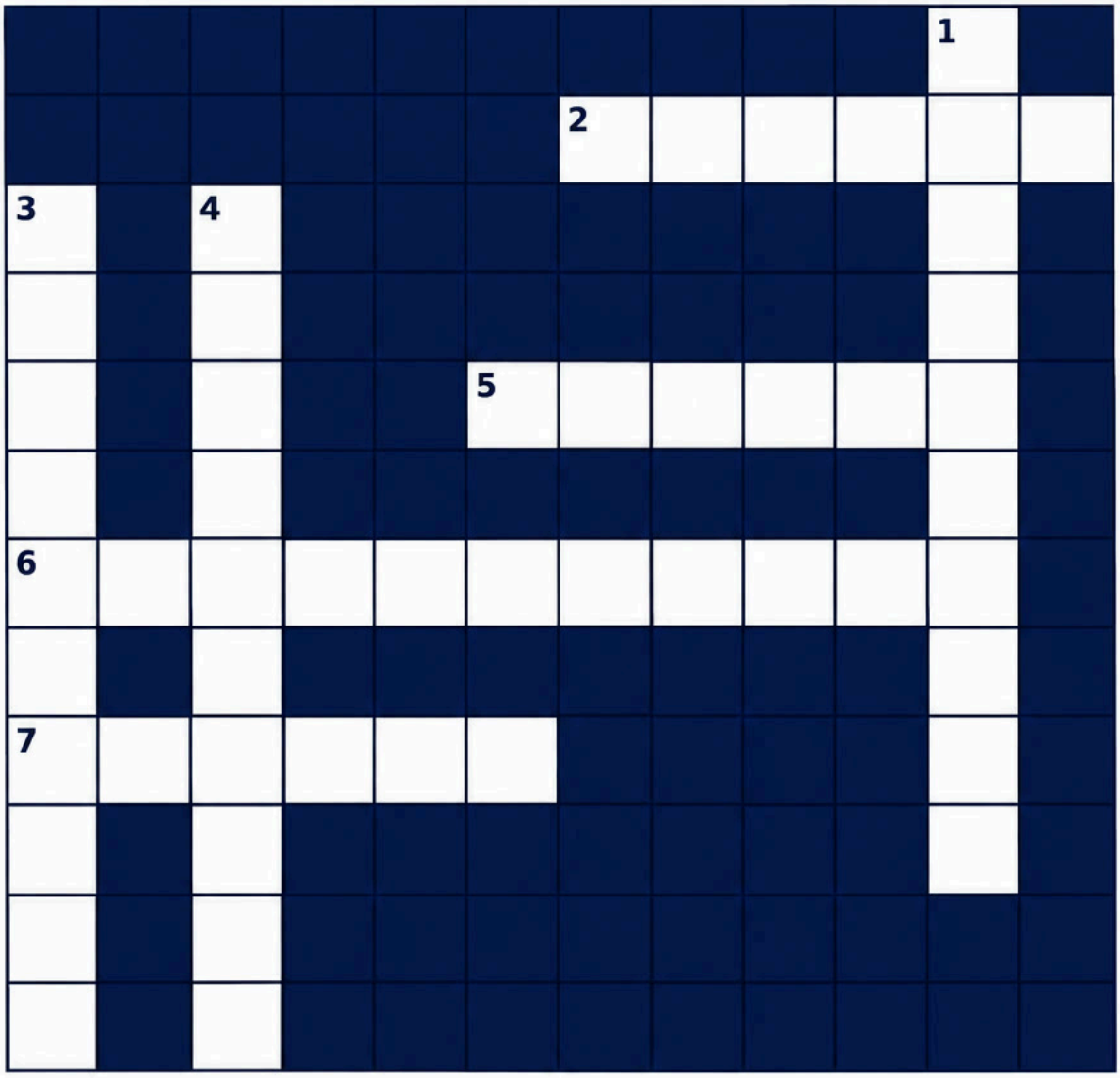
- ☐ ABSORPTION
- ☐ CONVEX LENS
- ☐ INCIDENT RAY
- ☐ NORMAL
- ☐ REFLECTED RAY
- ☐ REFLECTION
- ☐ SPECTRUM
- ☐ TRANSPARENT

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

KS3 SCIENCE · PHYSICS

Light

Crossword



Across

2 A coloured sheet that lets its own colour of light through (6)

5 Lets no light through (6)

6 Lets light through, so you can see clearly through it (11)

7 The layer at the back of the eye that detects light (6)

Down

1 When light bounces off a surface (10)

3 When a surface or a material sends light off in all directions (10)

4 A change in the direction of light as it enters a new material (10)

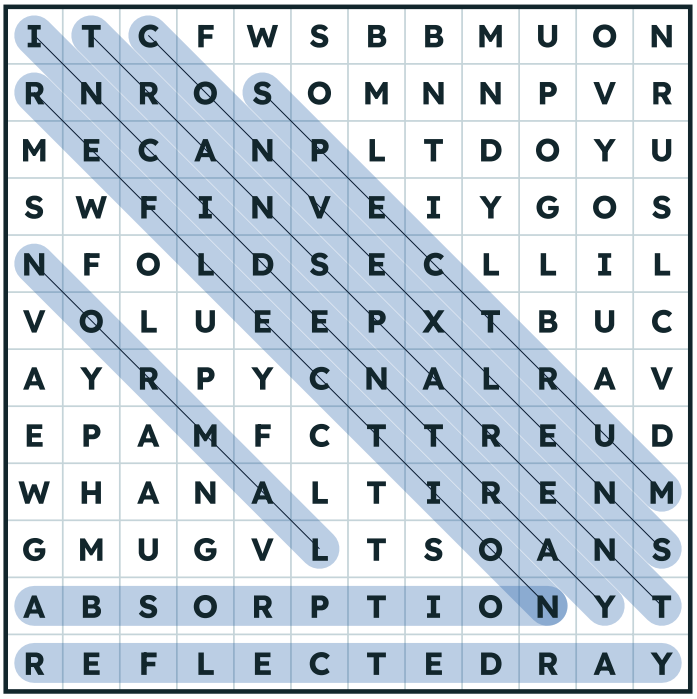
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS

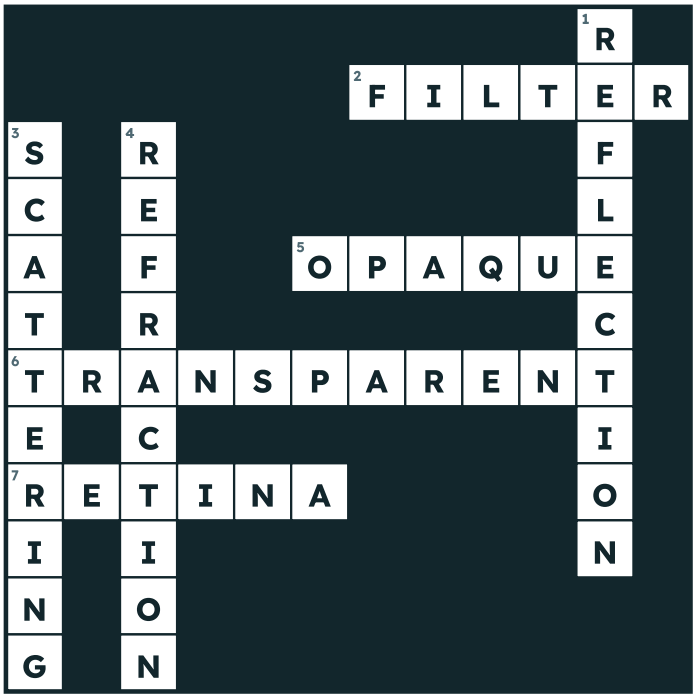
Light

Answers

Word search



Crossword



Across

2 Filter
A coloured sheet that lets its own colour of light through (6)

5 Opaque
Lets no light through (6)

6 Transparent
Lets light through, so you can see clearly through it (11)

7 Retina
The layer at the back of the eye that detects light (6)

Down

1 Reflection
When light bounces off a surface (10)

3 Scattering
When a surface or a material sends light off in all directions (10)

4 Refraction
A change in the direction of light as it enters a new material (10)

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

KS3 PHYSICS · LIGHT · LESSON 1

How light travels

Word search

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

Find these 8 words

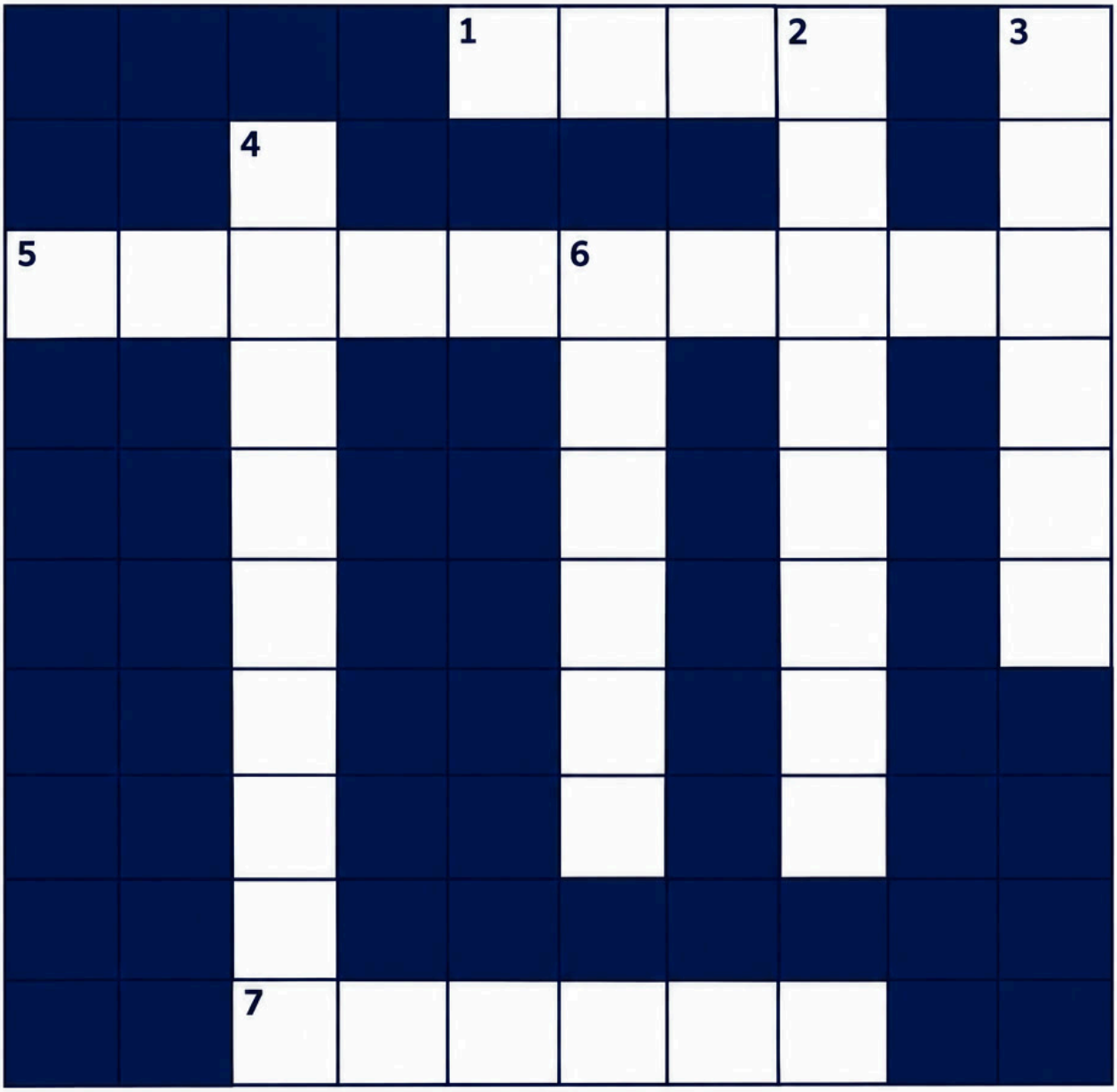
- ☐ ENERGY
- ☐ LONGITUDINAL
- ☐ PARTICLES
- ☐ PINHOLE
- ☐ SHADOW
- ☐ SPEED
- ☐ STRAIGHT
- ☐ TRANSVERSE

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

KS3 PHYSICS · LIGHT · LESSON 1

How light travels

Crossword



Across

1 Light is drawn as these: lines with arrows (4)

5 The type of wave that light is (10)

7 A dark patch behind an object, because light does not bend round it (6)

Down

2 Light travels in ___ lines (8)

3 Both light and sound carry this (6)

4 The general name for the tiny pieces of matter that sound needs to travel (9)

6 Empty space, where there is nothing to carry sound (6)

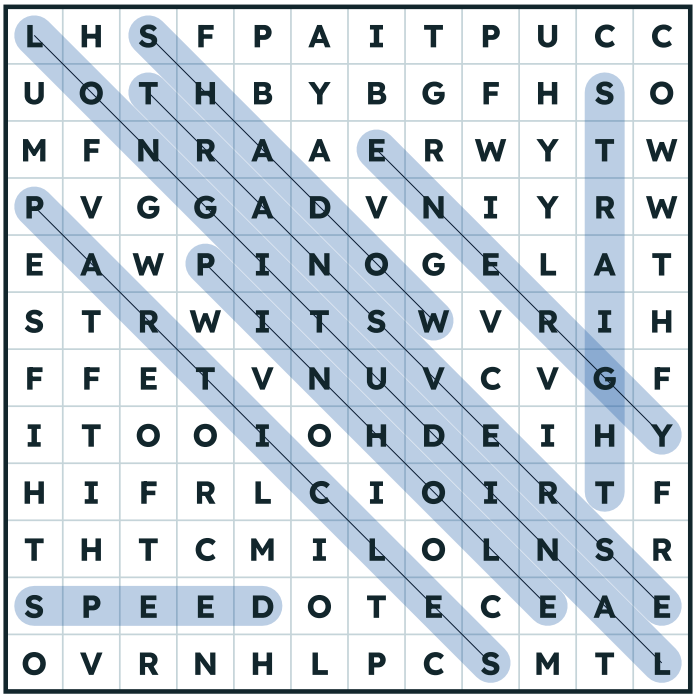
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · LIGHT

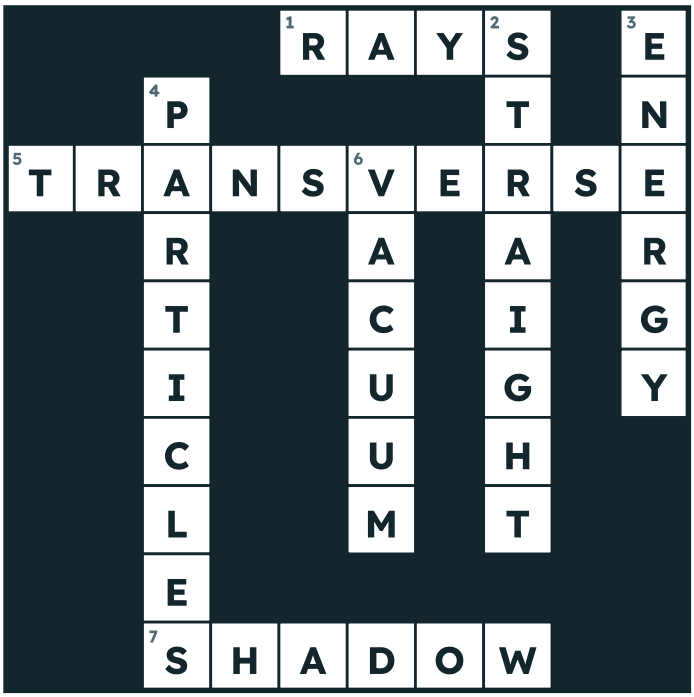
Lesson 1: How light travels

Answers

Word search



Crossword



Across

1 Rays
Light is drawn as these: lines with arrows (4)

5 Transverse
The type of wave that light is (10)

7 Shadow
A dark patch behind an object, because light does not bend round it (6)

Down

2 Straight
Light travels in ___ lines (8)

3 Energy
Both light and sound carry this (6)

4 Particles
The general name for the tiny pieces of matter that sound needs to travel (9)

6 Vacuum
Empty space, where there is nothing to carry 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 Light lesson 1 page of the KS3 Science revision site.

KS3 PHYSICS · LIGHT · LESSON 2

Reflection

Word search

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

Find these 8 words

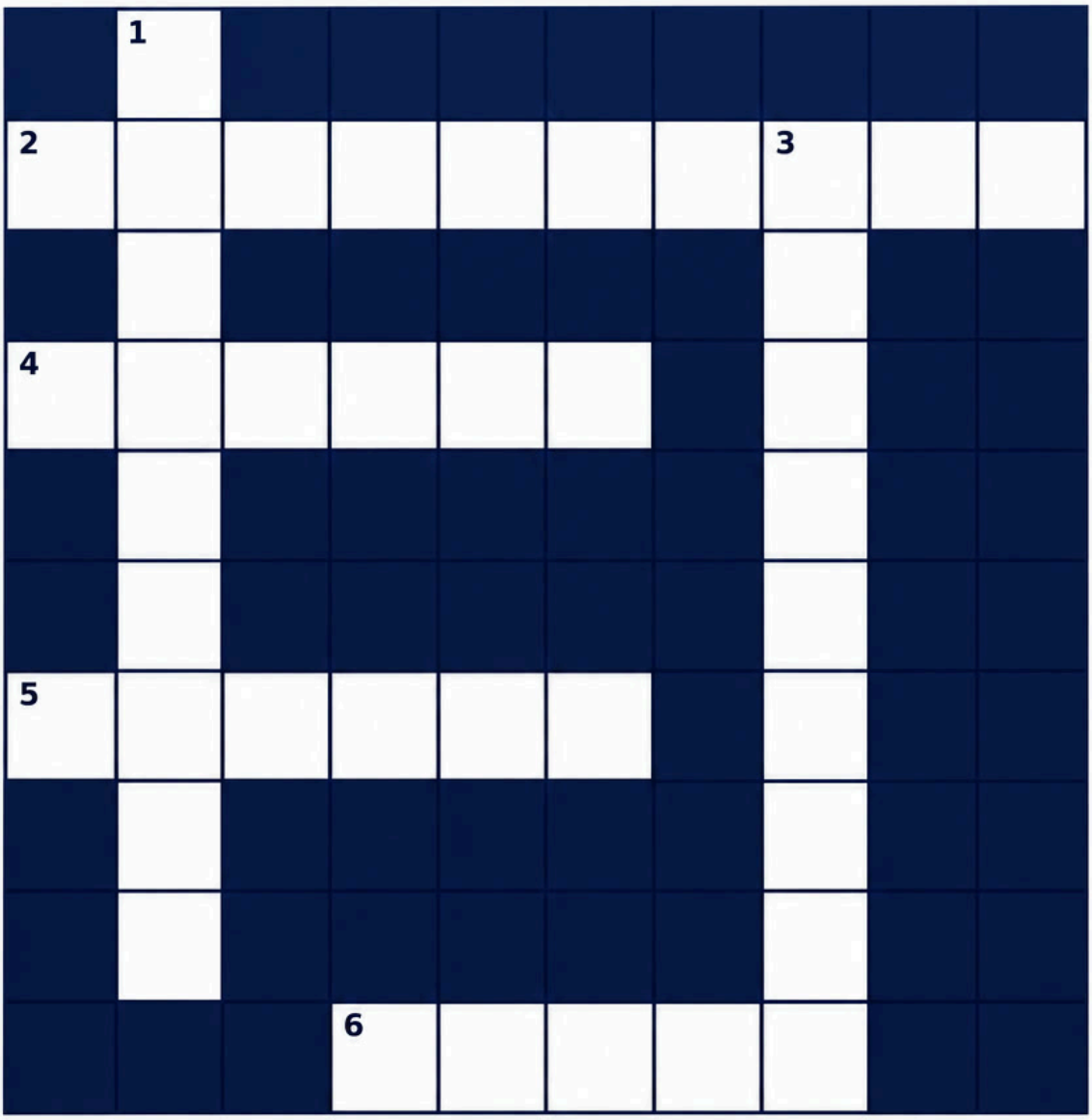
- ☐ BACKWARDS
- ☐ DIAGRAM
- ☐ IMAGE
- ☐ INCIDENCE
- ☐ MIRROR
- ☐ NORMAL
- ☐ PERISCOPE
- ☐ REFLECTION

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

KS3 PHYSICS • LIGHT • LESSON 2

Reflection

Crossword



Across

2 Light bouncing off a surface (10)

4 A flat one shows you the right way up and the same size (6)

5 The line at 90° to the surface from which the angles are measured (6)

6 It is the same size as you and seems as far behind the surface as you are in front (5)

Down

1 A device that turns the light so you can see over a wall (9)

3 The word that goes with "angle of" for the ray that arrives (9)

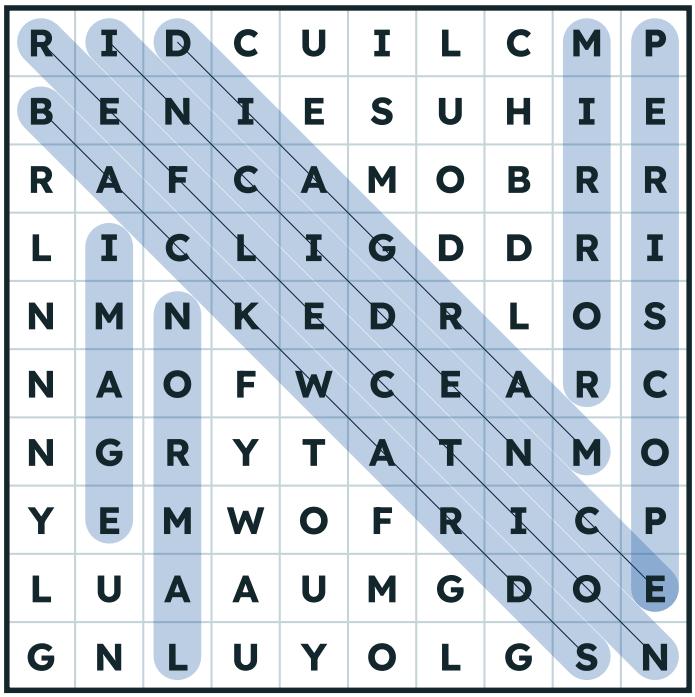
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · LIGHT

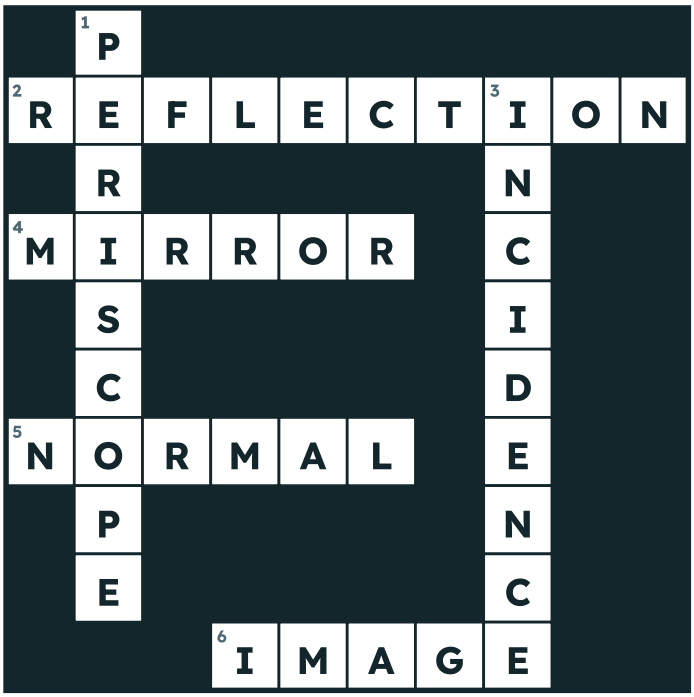
Lesson 2: Reflection

Answers

Word search



Crossword



Across

2 Reflection
Light bouncing off a surface (10)

4 Mirror
A flat one shows you the right way up and the same size (6)

5 Normal
The line at 90° to the surface from which the angles are measured (6)

6 Image
It is the same size as you and seems as far behind the surface as you are in front (5)

Down

1 Periscope
A device that turns the light so you can see over a wall (9)

3 Incidence
The word that goes with "angle of" for the ray that arrives (9)

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

KS3 PHYSICS · LIGHT · LESSON 3

Refraction

Word search

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

Find these 8 words

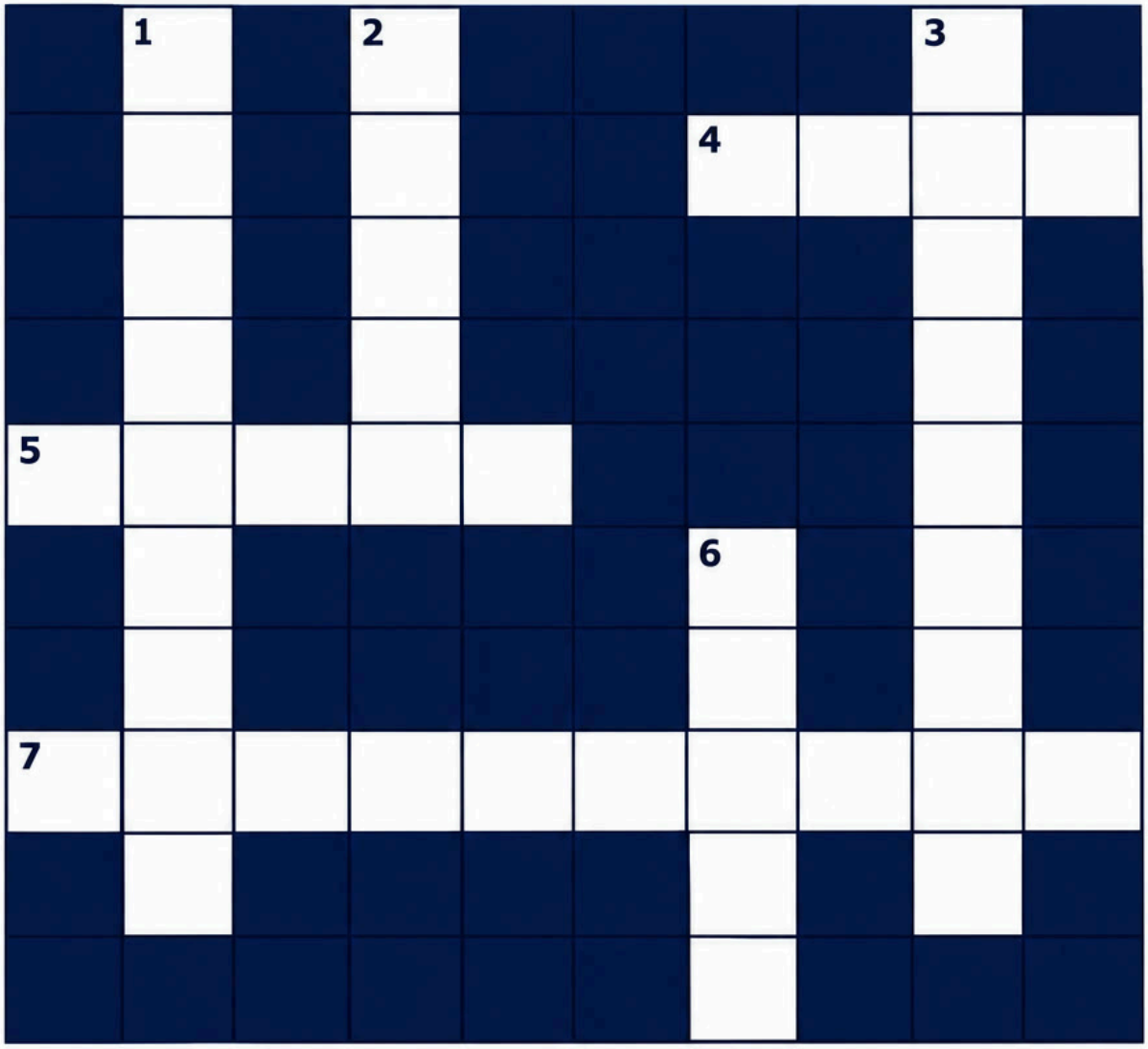
- ☐ COIN
- ☐ DIRECTION
- ☐ GLASS
- ☐ NORMAL
- ☐ REFRACTION
- ☐ SHALLOWER
- ☐ SLOWS
- ☐ WATER

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

KS3 PHYSICS · LIGHT · LESSON 3

Refraction

Crossword



Across

4 The piece of metal money at the bottom of a pool that looks higher than it is (4)

5 A transparent solid in which light travels more slowly than in air (5)

7 The bending of light as it crosses into a new transparent material (10)

Down

1 A pool looks ___ than it really is (9)

2 Goes more slowly, as light does going from air into a transparent solid (5)

3 Light changes this when it crosses at an angle from one material into another (9)

6 A transparent liquid that makes a pool look shallow (5)

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

KS3 SCIENCE · PHYSICS · LIGHT

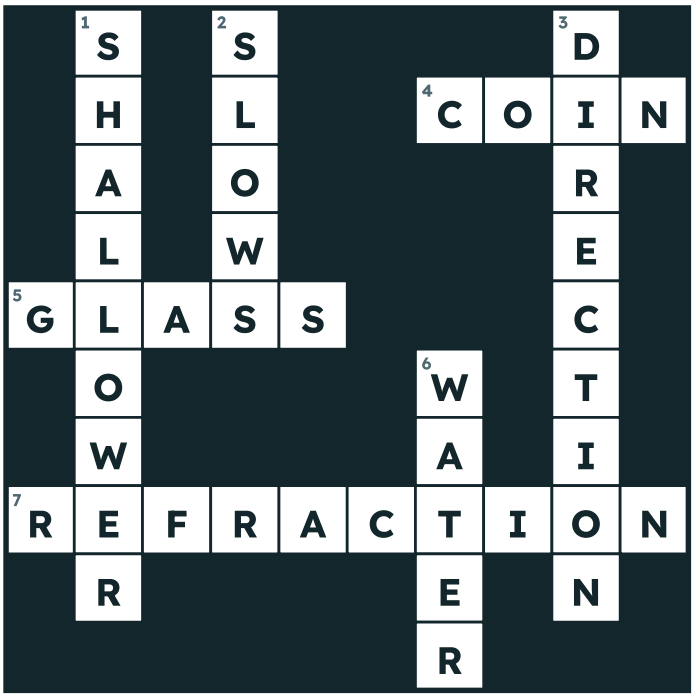
Lesson 3: Refraction

Answers

Word search

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

Crossword



Across

4 Coin
The piece of metal money at the bottom of a pool that looks higher than it is (4)

5 Glass
A transparent solid in which light travels more slowly than in air (5)

7 Refraction
The bending of light as it crosses into a new transparent material (10)

Down

1 Shallower
A pool looks ___ than it really is (9)

2 Slows
Goes more slowly, as light does going from air into a transparent solid (5)

3 Direction
Light changes this when it crosses at an angle from one material into another (9)

6 Water
A transparent liquid that makes a pool look shallow (5)

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

KS3 PHYSICS · LIGHT · LESSON 4

Lenses and the eye

Word search

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

Find these 8 words

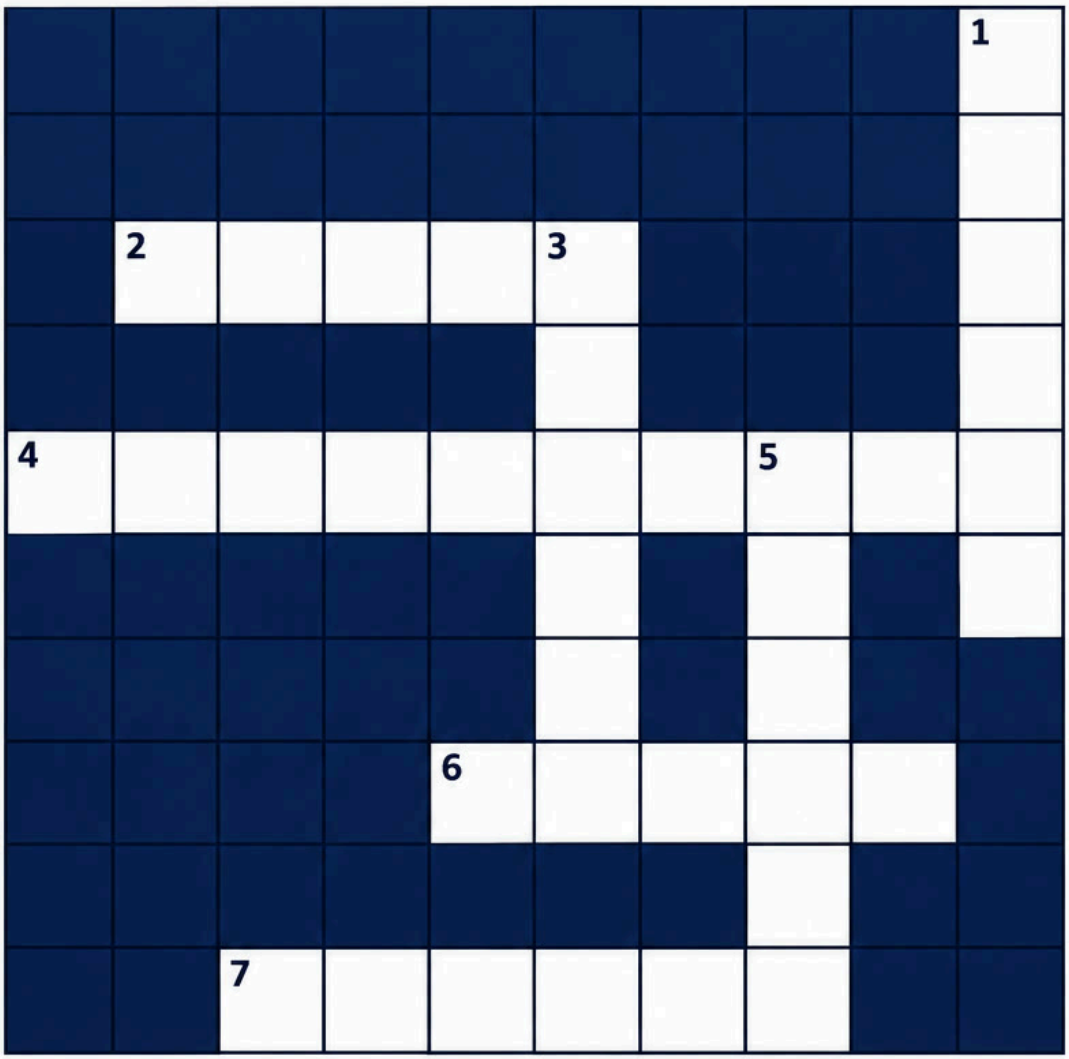
- ☐ BRAIN
- ☐ CAMERA
- ☐ CONVEX
- ☐ CORNEA
- ☐ FOCUS
- ☐ OPTIC NERVE
- ☐ RETINA
- ☐ SENSOR

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

KS3 PHYSICS · LIGHT · LESSON 4

Lenses and the eye

Crossword



Across

2 The point where rays that were parallel meet after passing through a lens (5)

4 It carries electrical signals away from the back of the eye (5,5)

6 It makes sense of the upside-down image the right way up (5)

7 A device that works like an eye (6)

Down

1 A lens that bends rays towards each other (6)

3 The part inside a device for taking digital photographs that turns light into electrical signals (6)

5 The layer at the back of the eye that detects light (6)

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

KS3 SCIENCE · PHYSICS · LIGHT

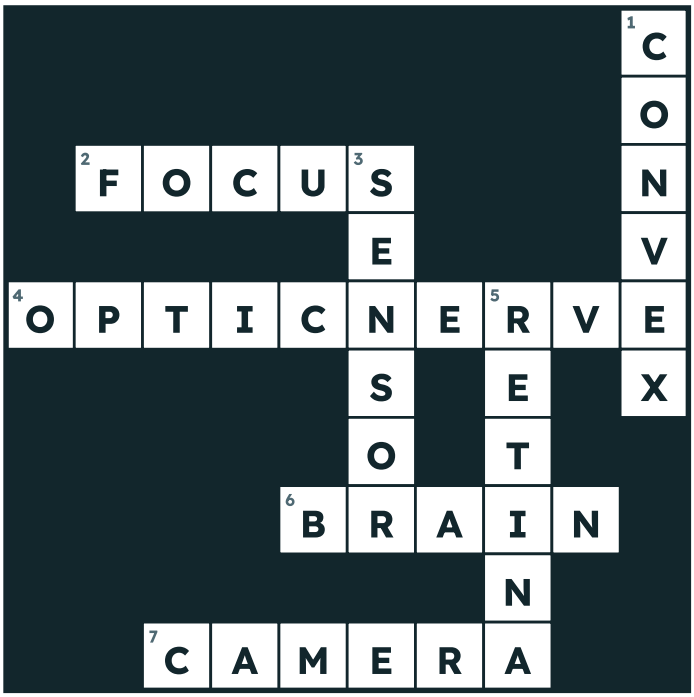
Lesson 4: Lenses and the eye

Answers

Word search



Crossword



Across

2 Focus
The point where rays that were parallel meet after passing through a lens (5)

4 Optic nerve
It carries electrical signals away from the back of the eye (5,5)

6 Brain
It makes sense of the upside-down image the right way up (5)

7 Camera
A device that works like an eye (6)

Down

1 Convex
A lens that bends rays towards each other (6)

3 Sensor
The part inside a device for taking digital photographs that turns light into electrical signals (6)

5 Retina
The layer at the back of the eye that detects light (6)

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

KS3 PHYSICS · LIGHT · LESSON 5

Colour and prisms

Word search

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

Find these 8 words

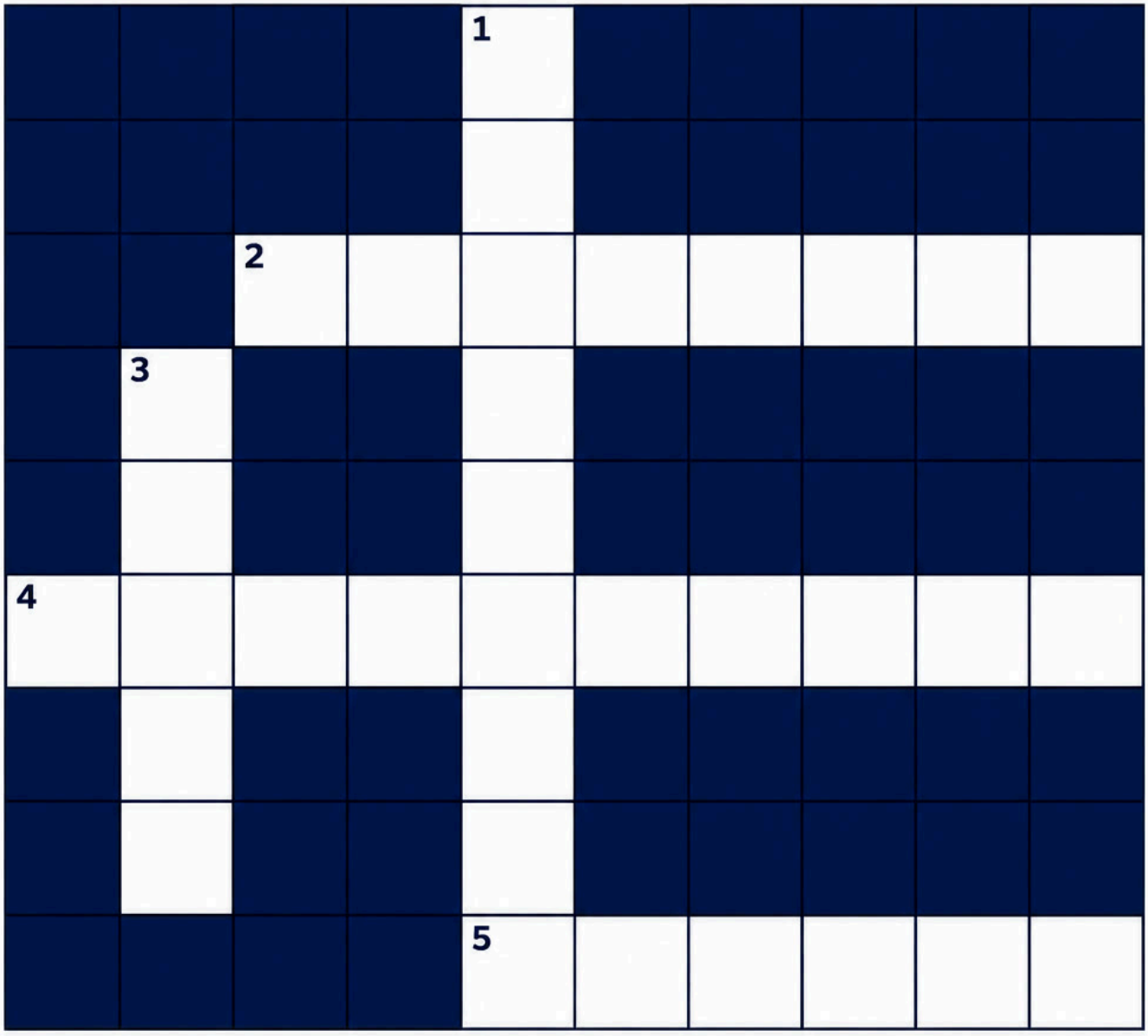
- ☐ DISPERSION
- ☐ FREQUENCY
- ☐ GREEN
- ☐ ORANGE
- ☐ PRISM
- ☐ RAINBOW
- ☐ VIOLET
- ☐ YELLOW

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

KS3 PHYSICS · LIGHT · LESSON 5

Colour and prisms

Crossword



Across

2 The band of colours made when white light is split up (8)

4 The splitting of white light into its colours (10)

5 The third of the seven colours of white light (6)

Down

1 Each colour has its own one; red has the lowest (9)

3 A shaped piece of transparent material that splits white light into colours (5)

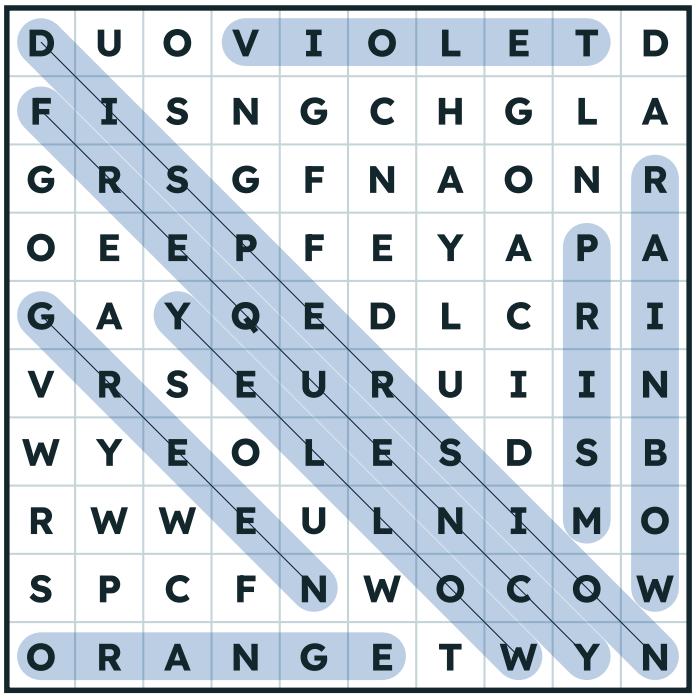
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · LIGHT

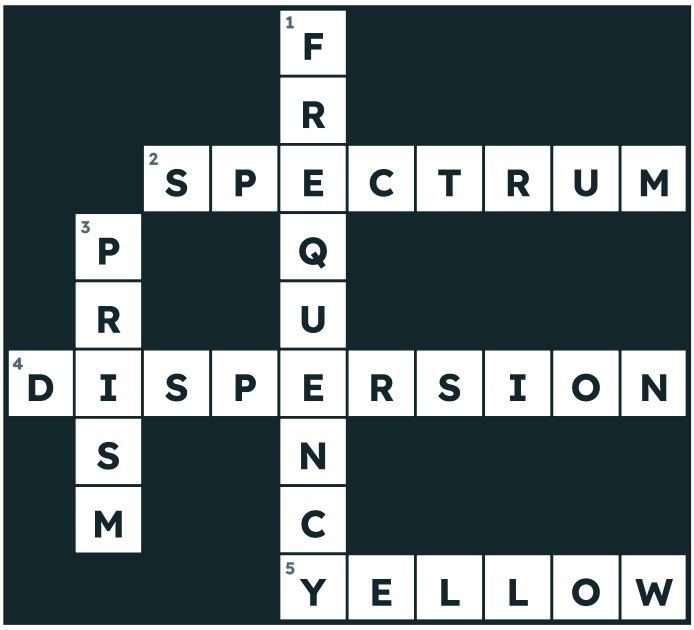
Lesson 5: Colour and prisms

Answers

Word search



Crossword



Across

2 Spectrum
The band of colours made when white light is split up (8)

4 Dispersion
The splitting of white light into its colours (10)

5 Yellow
The third of the seven colours of white light (6)

Down

1 Frequency
Each colour has its own one; red has the lowest (9)

3 Prism
A shaped piece of transparent material that splits white light into colours (5)

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

KS3 PHYSICS · LIGHT · LESSON 6

Coloured objects and filters

Word search

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

Find these 8 words

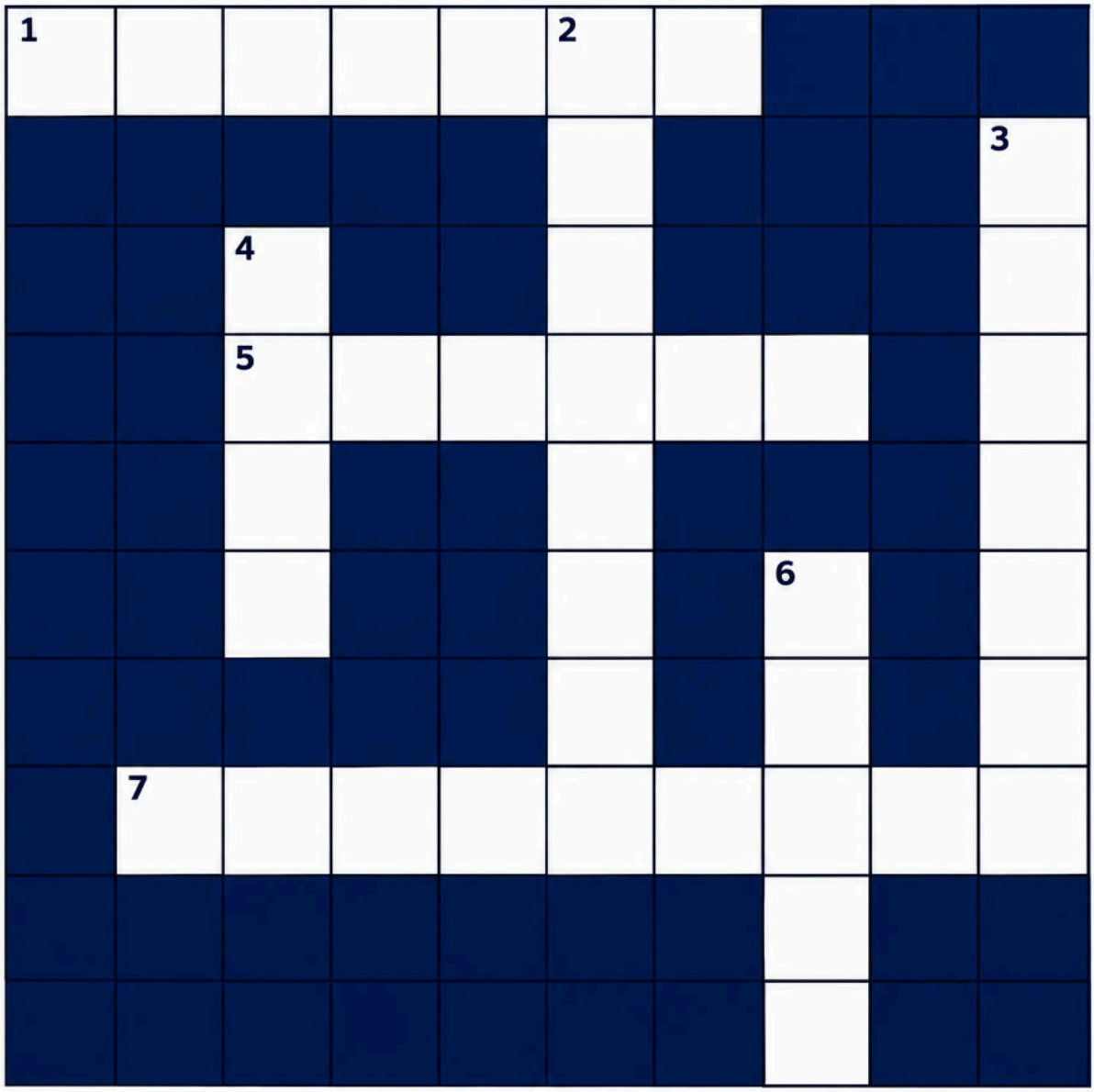
- ☐ ABSORBS
- ☐ BLACK
- ☐ CYAN
- ☐ FILTER
- ☐ REFLECTS
- ☐ TRANSMITS
- ☐ WHITE
- ☐ YELLOW

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

KS3 PHYSICS · LIGHT · LESSON 6

Coloured objects and filters

Crossword



Across

1 Red, green and blue are these colours of light (7)

5 Red and green light make this (6)

7 Lets light pass through, as a transparent red sheet does for red light (9)

Down

2 Sends light back, as a red apple does with red light (8)

3 Takes the light in, so none comes back (7)

4 Green and blue light make this (4)

6 Things that send back every colour look this (5)

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

KS3 SCIENCE · PHYSICS · LIGHT

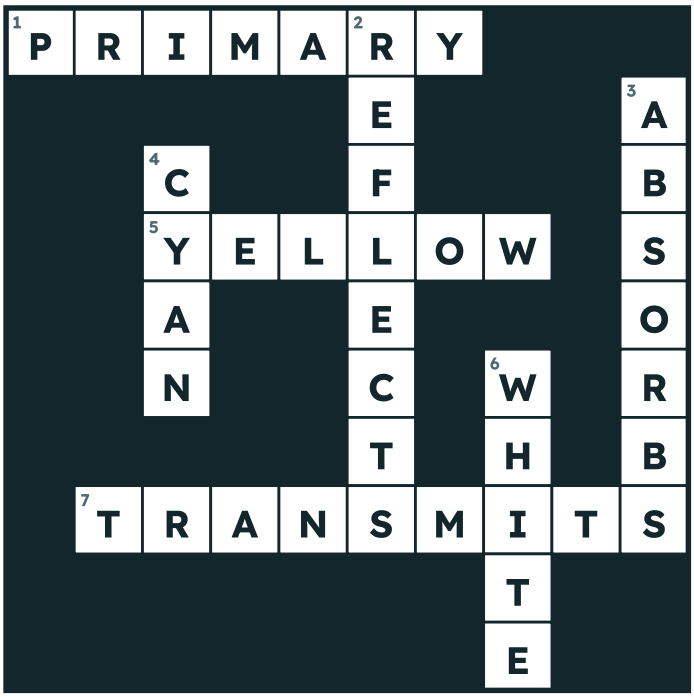
Lesson 6: Coloured objects and filters

Answers

Word search

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

Crossword



Across

1 Primary
Red, green and blue are these colours of light (7)

5 Yellow
Red and green light make this (6)

7 Transmits
Lets light pass through, as a transparent red sheet does for red light (9)

Down

2 Reflects
Sends light back, as a red apple does with red light (8)

3 Absorbs
Takes the light in, so none comes back (7)

4 Cyan
Green and blue light make this (4)

6 White
Things that send back every colour look this (5)

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

KS3 PHYSICS · LIGHT · LESSON 7

Light and materials

Word search

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

Find these 8 words

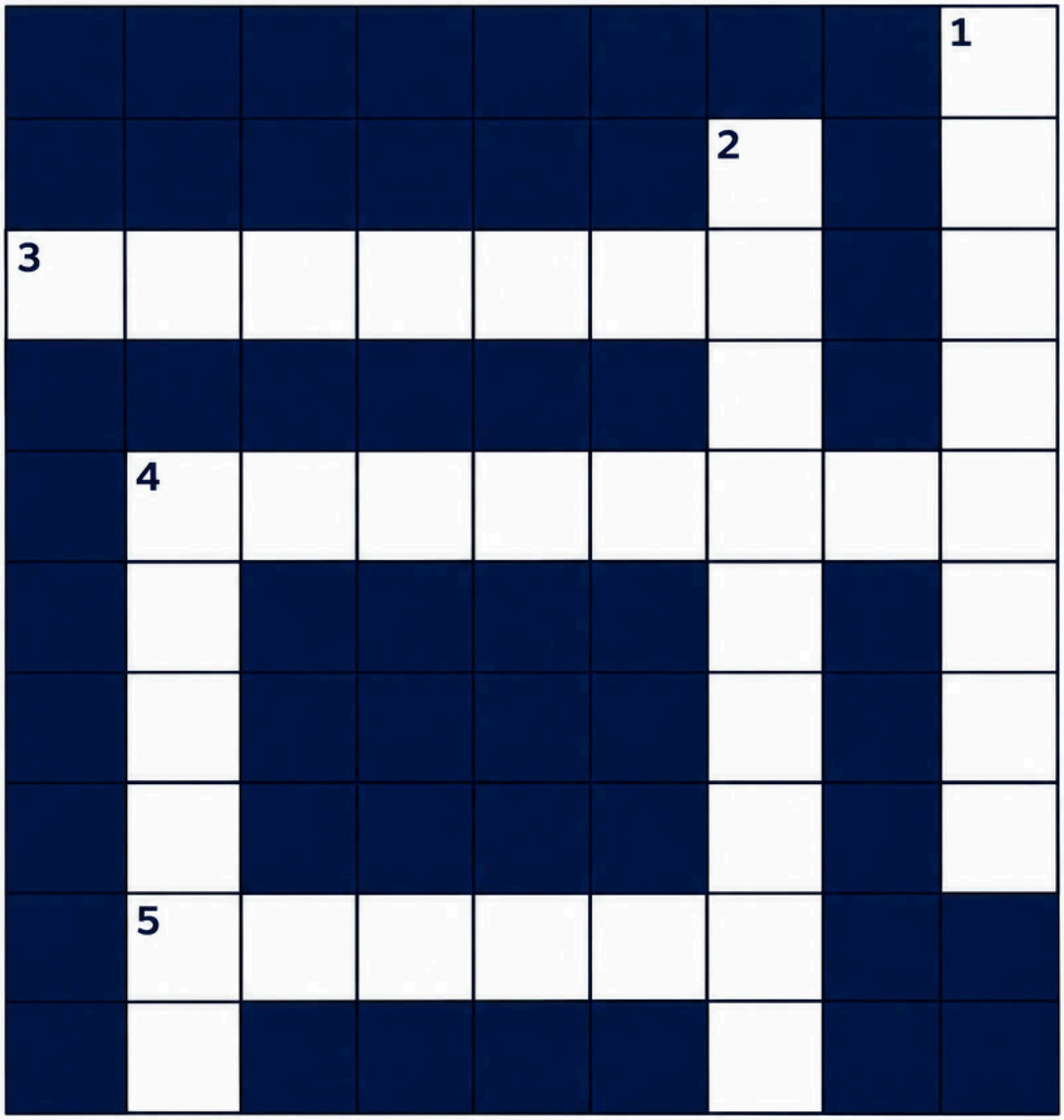
- ☐ ABSORBED
- ☐ DIFFUSE
- ☐ MIRROR
- ☐ OPAQUE
- ☐ SHADOW
- ☐ TRANSLUCENT
- ☐ TRANSMITTED
- ☐ TRANSPARENT

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

KS3 PHYSICS · LIGHT · LESSON 7

Light and materials

Crossword



Across

3 A rough surface scatters light in all directions in this way (7)

4 The kind of reflection from a very smooth surface that gives an image (8)

5 Lets no light through (6)

Down

1 Light that is this transfers its energy to the material, which warms up (8)

2 Light that bounces off a smooth surface, with its rays staying in order, is this (9)

4 A dark patch where light is blocked (6)

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

KS3 SCIENCE · PHYSICS · LIGHT

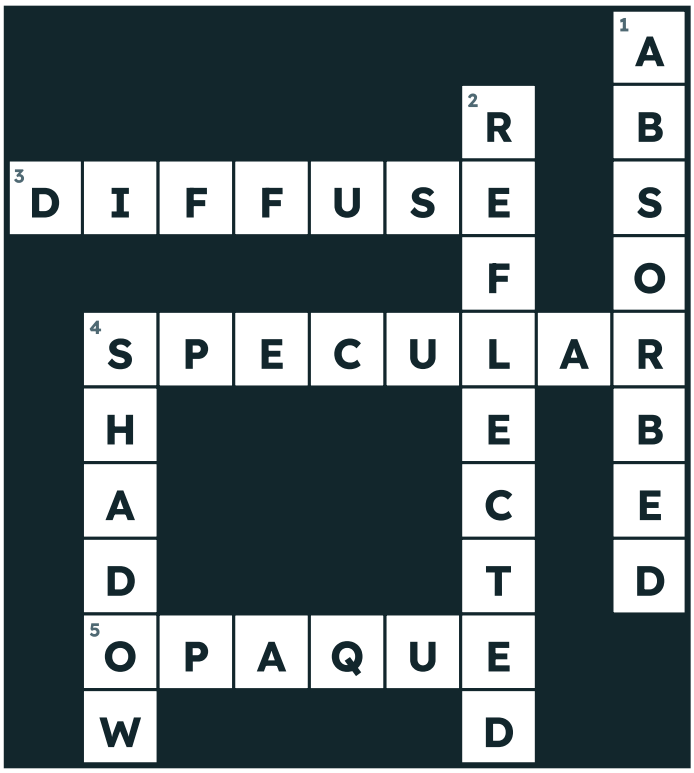
Lesson 7: Light and materials

Answers

Word search



Crossword



Across

3 Diffuse
A rough surface scatters light in all directions in this way (7)

4 Specular
The kind of reflection from a very smooth surface that gives an image (8)

5 Opaque
Lets no light through (6)

Down

1 Absorbed
Light that is this transfers its energy to the material, which warms up (8)

2 Reflected
Light that bounces off a smooth surface, with its rays staying in order, is this (9)

4 Shadow
A dark patch where light is blocked (6)

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