KS3 SCIENCE · PHYSICS

Forces

Word search

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

Find these 9 words

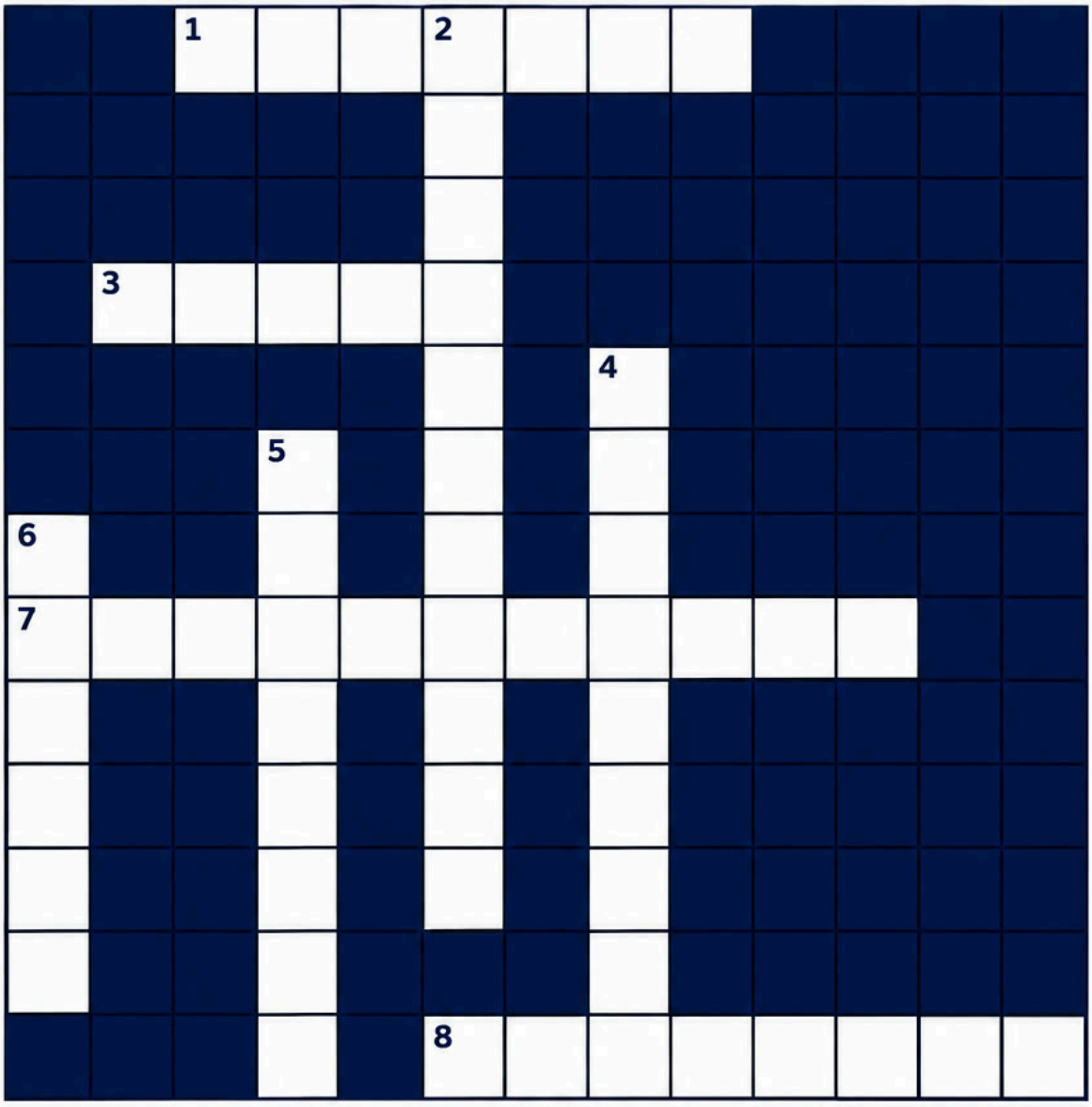
- ☐ EQUILIBRIUM
- ☐ FORCE
- ☐ FRICTION
- ☐ LUBRICANT
- ☐ NEWTON METER
- ☐ STREAMLINED
- ☐ TENSION
- ☐ UPTHRUST
- ☐ WEIGHT

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

KS3 SCIENCE · PHYSICS

Forces

Crossword



Across

1 The pulling force in a rope or string (7)

3 A push or a pull (5)

7 When the forces on an object are balanced (11)

8 Upward push from a liquid or a gas (8)

Down

2 Shaped to cut down drag (11)

4 A substance, such as oil, that reduces friction (9)

5 Opposes sliding between two surfaces (8)

6 The pull of gravity on an object (6)

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

KS3 SCIENCE · PHYSICS

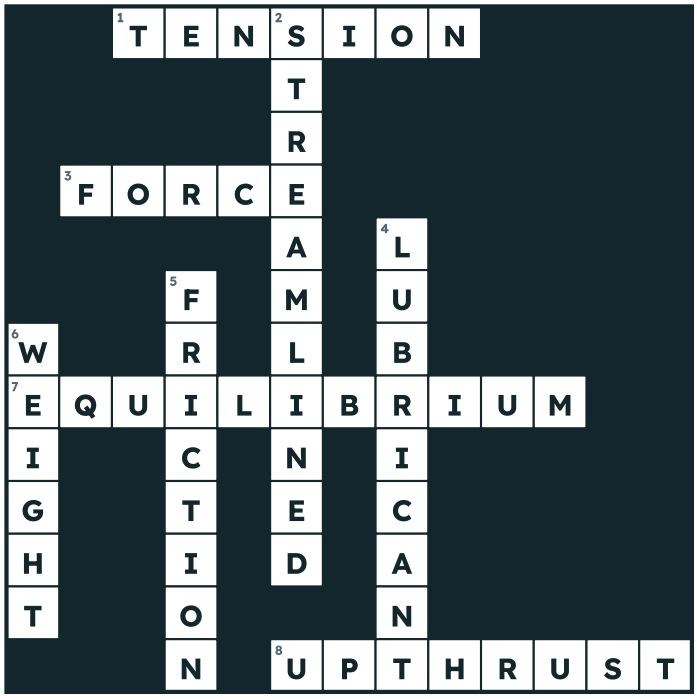
Forces

Answers

Word search

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

Crossword



Across

1 Tension
The pulling force in a rope or string (7)

3 Force
A push or a pull (5)

7 Equilibrium
When the forces on an object are balanced (11)

8 Upthrust
Upward push from a liquid or a gas (8)

Down

2 Streamlined
Shaped to cut down drag (11)

4 Lubricant
A substance, such as oil, that reduces friction (9)

5 Friction
Opposes sliding between two surfaces (8)

6 Weight
The pull of gravity on an object (6)

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

KS3 PHYSICS · FORCES · LESSON 1

What forces do

Word search

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

Find these 8 words

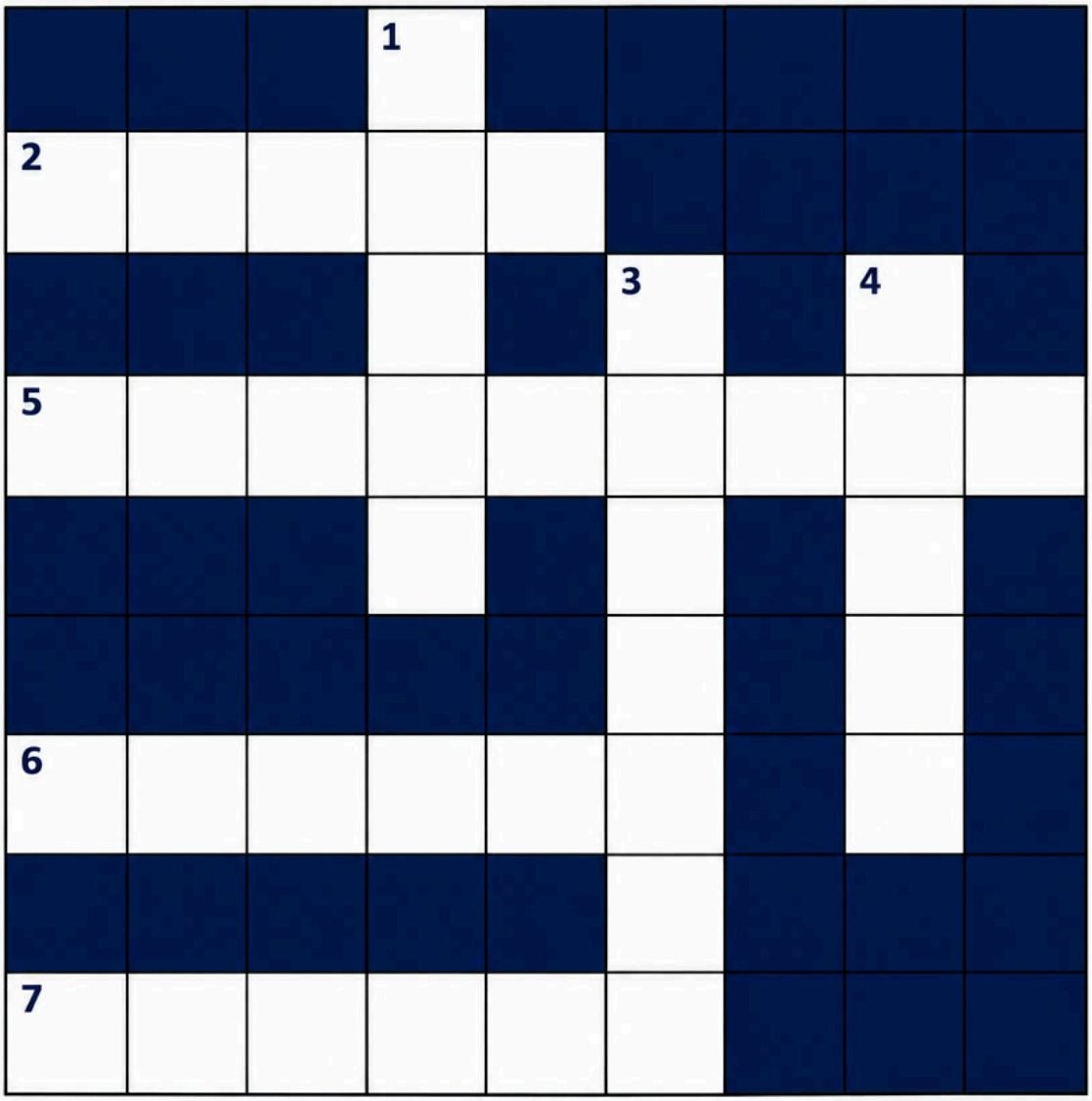
- ☐ DIRECTION
- ☐ FORCE
- ☐ NEWTON METER
- ☐ RACKET
- ☐ SHAPE
- ☐ SPEED
- ☐ SQUASH
- ☐ STRETCH

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

KS3 PHYSICS · FORCES · LESSON 1

What forces do

Crossword



Across

2 A squeeze changes the ___ of a sponge (5)

5 Sending a ball back the way it came changes this (9)

6 A tennis player hits the ball with this (6)

7 To press something flat, as a squeeze does to a sponge (6)

Down

1 A kick changes this for a still ball, so that it starts to move (5)

3 To pull something so that it gets longer (7)

4 A push or a pull (5)

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

KS3 SCIENCE · PHYSICS · FORCES

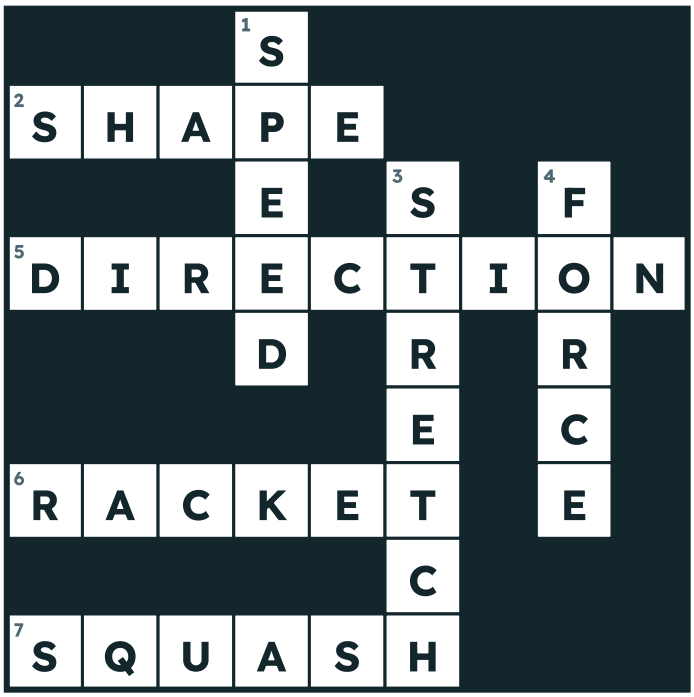
Lesson 1: What forces do

Answers

Word search

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

Crossword



Across

2 Shape
A squeeze changes the ___ of a sponge (5)

5 Direction
Sending a ball back the way it came changes this (9)

6 Racket
A tennis player hits the ball with this (6)

7 Squash
To press something flat, as a squeeze does to a sponge (6)

Down

1 Speed
A kick changes this for a still ball, so that it starts to move (5)

3 Stretch
To pull something so that it gets longer (7)

4 Force
A push or a pull (5)

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

KS3 PHYSICS · FORCES · LESSON 2

Contact and non-contact forces

Word search

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

Find these 8 words

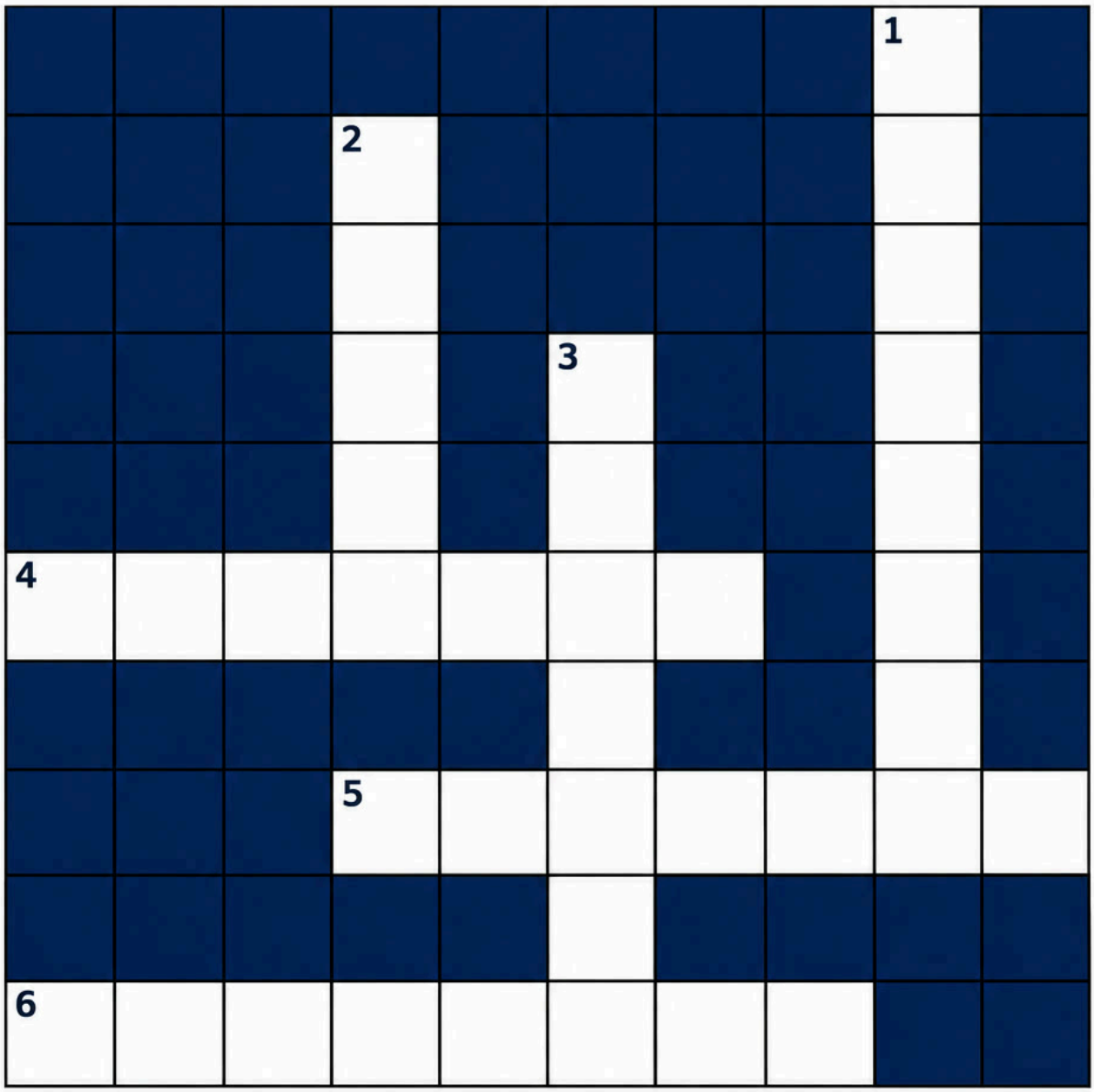
- ☐ FLOAT
- ☐ FRICTION
- ☐ GRAVITY
- ☐ MAGNETIC
- ☐ NEWTONS
- ☐ TENSION
- ☐ UPTHRUST
- ☐ WEIGHT

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

KS3 PHYSICS · FORCES · LESSON 2

Contact and non-contact forces

Crossword



Across

4 Forces are measured in these (7)

5 A pull between any two objects, even across a gap (7)

6 The ___ force can lift paper clips across a gap (8)

Down

1 The upward push of water or air on an object (8)

2 Upward push from the water lets a boat do this (5)

3 The group name for forces that act only when things touch (7)

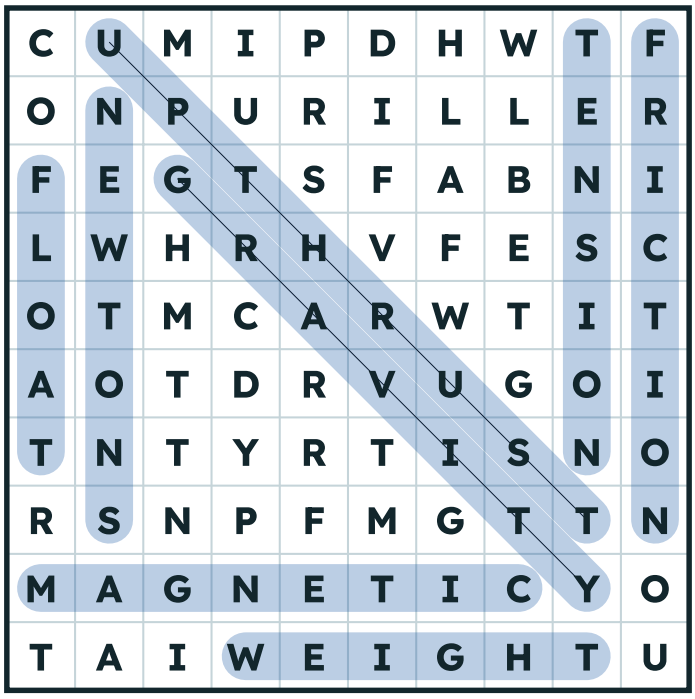
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · FORCES

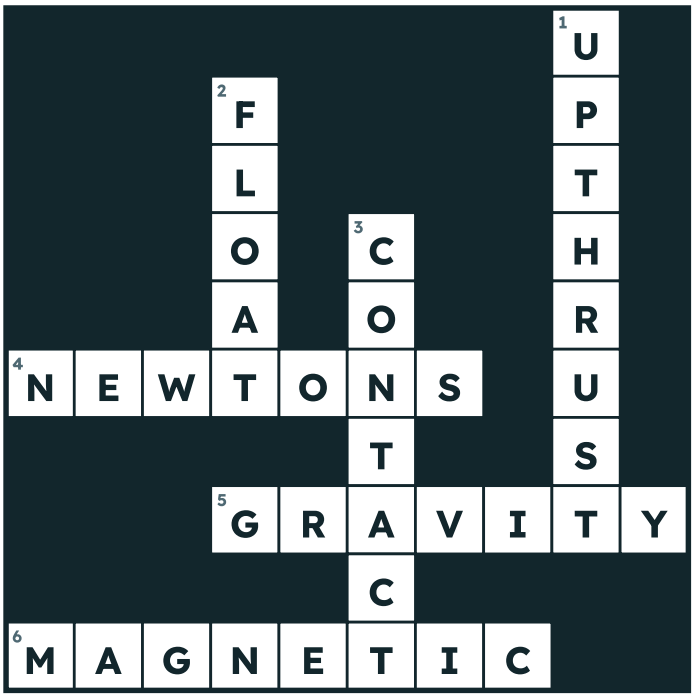
Lesson 2: Contact and non-contact forces

Answers

Word search



Crossword



Across

4 Newtons
Forces are measured in these (7)

5 Gravity
A pull between any two objects, even across a gap (7)

6 Magnetic
The ___ force can lift paper clips across a gap (8)

Down

1 Upthrust
The upward push of water or air on an object (8)

2 Float
Upward push from the water lets a boat do this (5)

3 Contact
The group name for forces that act only when things touch (7)

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

KS3 PHYSICS · FORCES · LESSON 3

Force diagrams

Word search

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

Find these 8 words

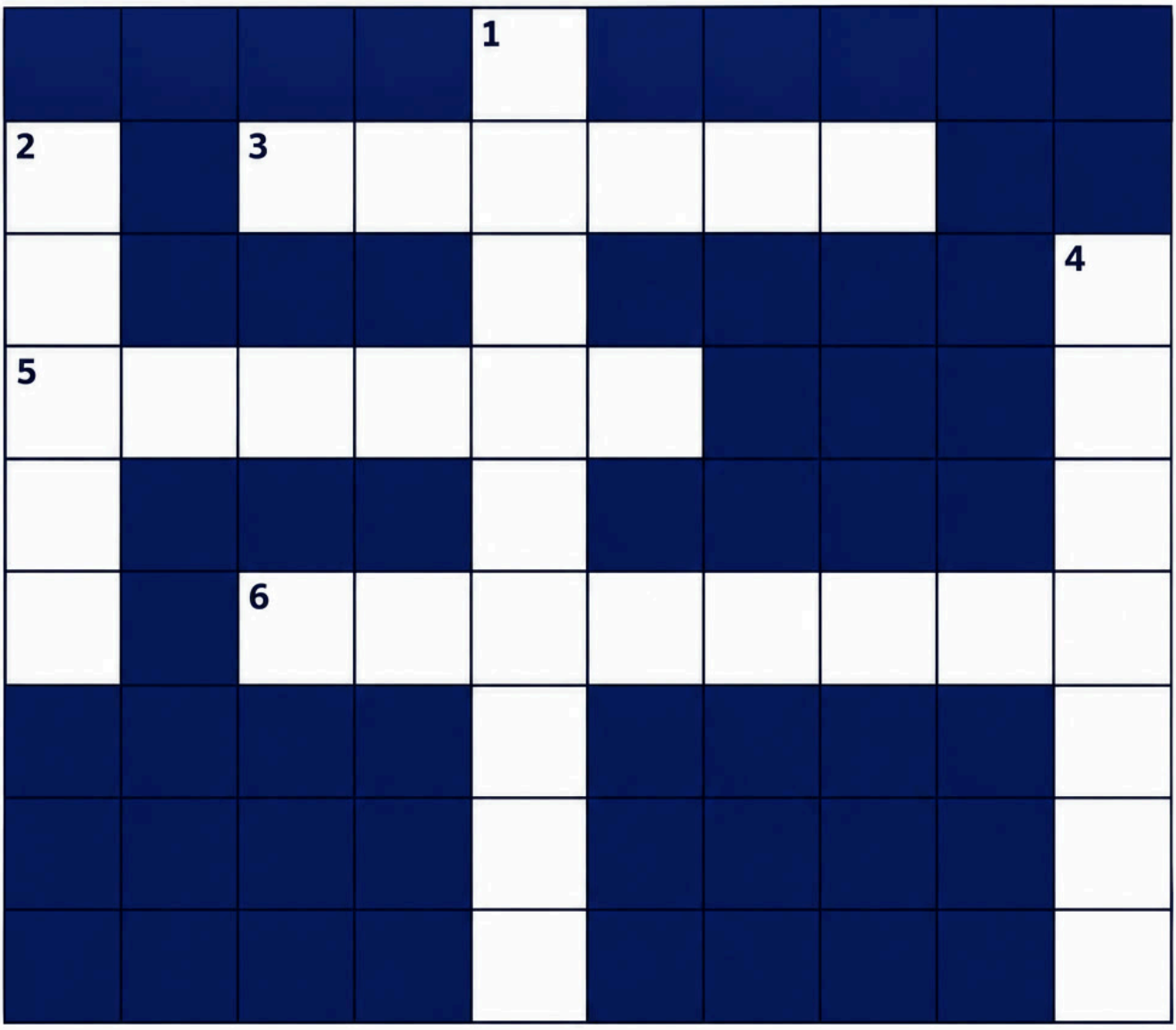
- ☐ BIGGER
- ☐ DIAGRAM
- ☐ DIRECTION
- ☐ LABEL
- ☐ LENGTH
- ☐ NEWTONS
- ☐ UPTHRUST
- ☐ WEIGHT

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

KS3 PHYSICS · FORCES · LESSON 3

Force diagrams

Crossword



Across

3 The downward force on a boat, from gravity (6)

5 A longer arrow shows a ___ force (6)

6 The upward force on a floating boat (8)

Down

1 The way an arrow points shows the ___ of the force (9)

2 Add one to each arrow: the force's name and, if you know it, its size (5)

4 The size of a force is given in these (7)

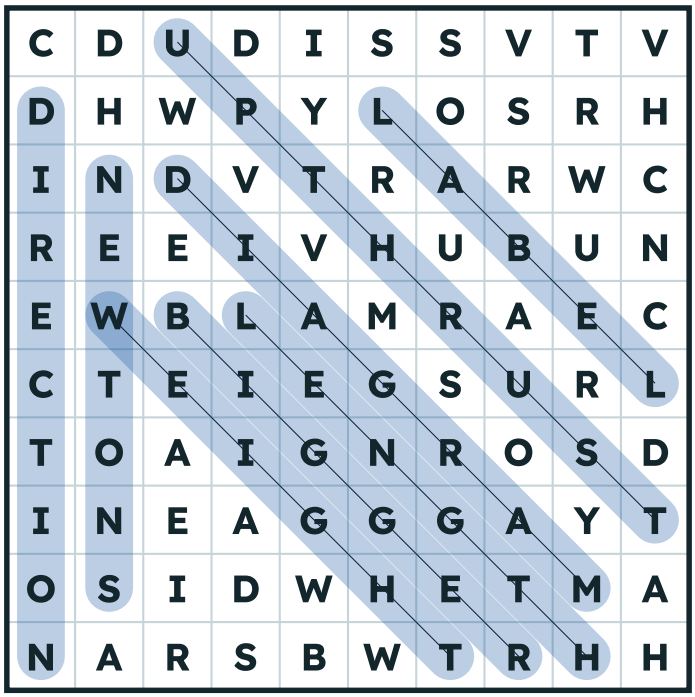
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · FORCES

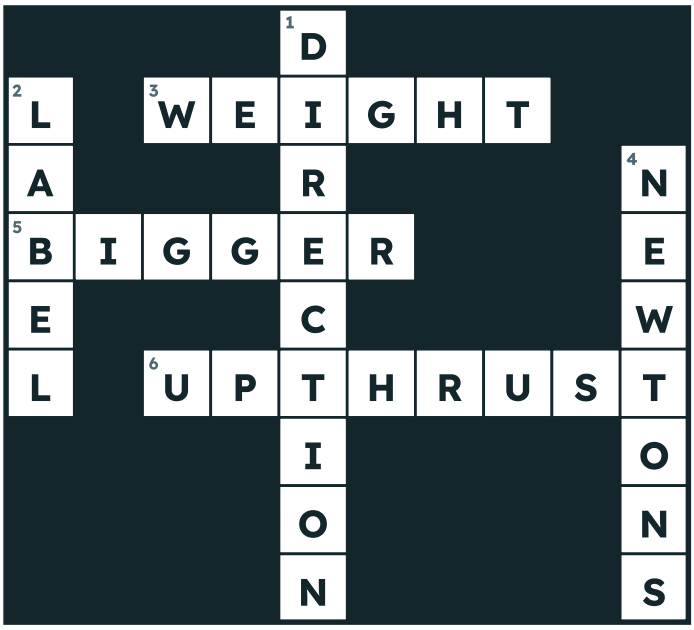
Lesson 3: Force diagrams

Answers

Word search



Crossword



Across

3 Weight
The downward force on a boat, from gravity (6)

5 Bigger
A longer arrow shows a ___ force (6)

6 Upthrust
The upward force on a floating boat (8)

Down

1 Direction
The way an arrow points shows the ___ of the force (9)

2 Label
Add one to each arrow: the force's name and, if you know it, its size (5)

4 Newtons
The size of a force is given in these (7)

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

KS3 PHYSICS · FORCES · LESSON 4

Balanced and unbalanced forces

Word search

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

Find these 8 words

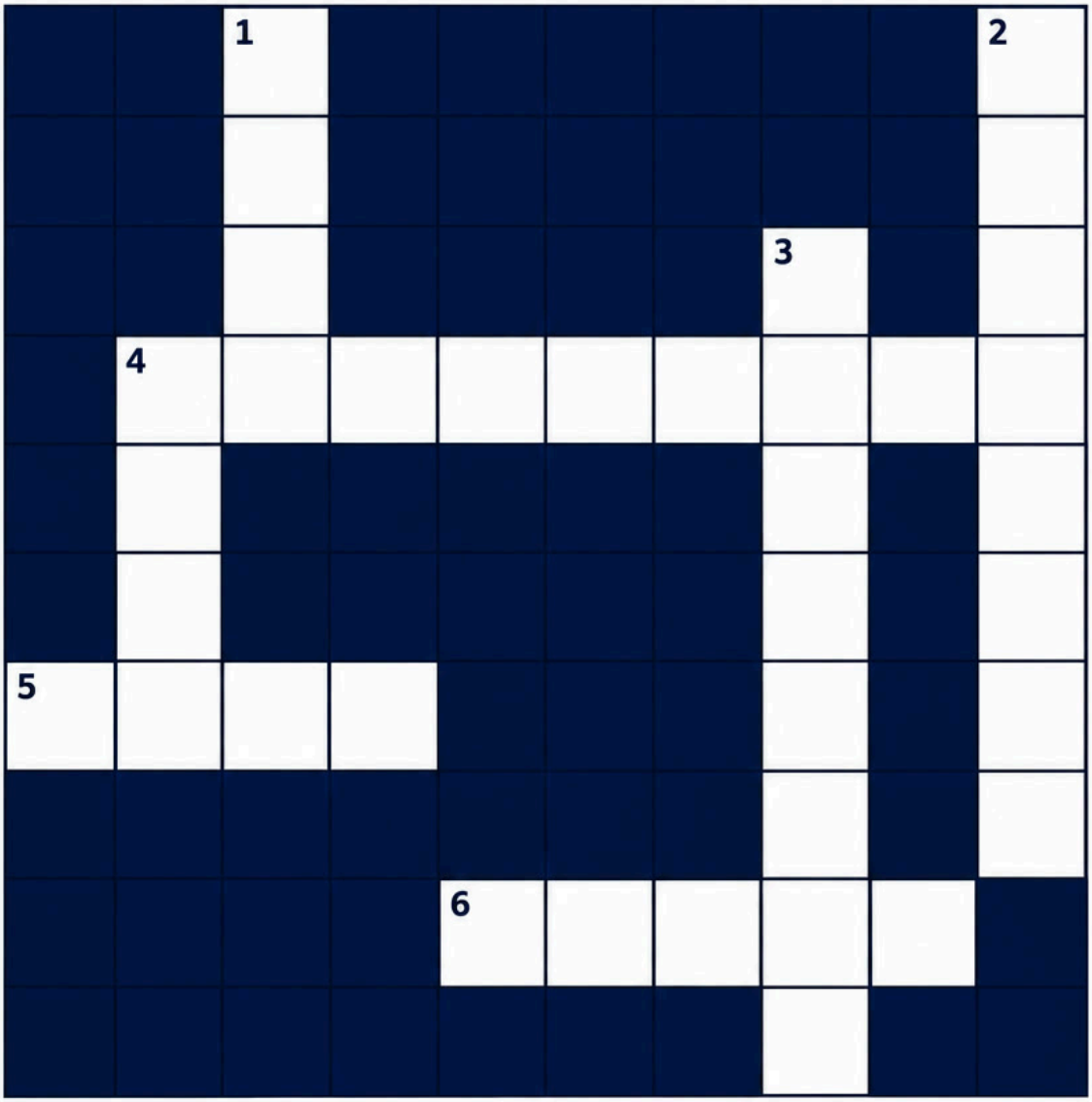
- ☐ BALANCED
- ☐ COMBINE
- ☐ EQUILIBRIUM
- ☐ ROPE
- ☐ SAME
- ☐ SPEED
- ☐ SUBTRACT
- ☐ ZERO

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

KS3 PHYSICS · FORCES · LESSON 4

Balanced and unbalanced forces

Crossword



Across

4 The one overall force that all the forces on an object add up to (9)

5 Pull with 500 N one way and 500 N the other: the overall force is this (4)

6 Unbalanced forces change an object's direction or its ___ (5)

Down

1 Forces in the ___ direction are added (4)

2 What you do to two forces that act in opposite directions (8)

3 Forces that cancel out (8)

4 Both teams pull on this in a tug of war (4)

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

KS3 SCIENCE · PHYSICS · FORCES

Lesson 4: Balanced and unbalanced forces

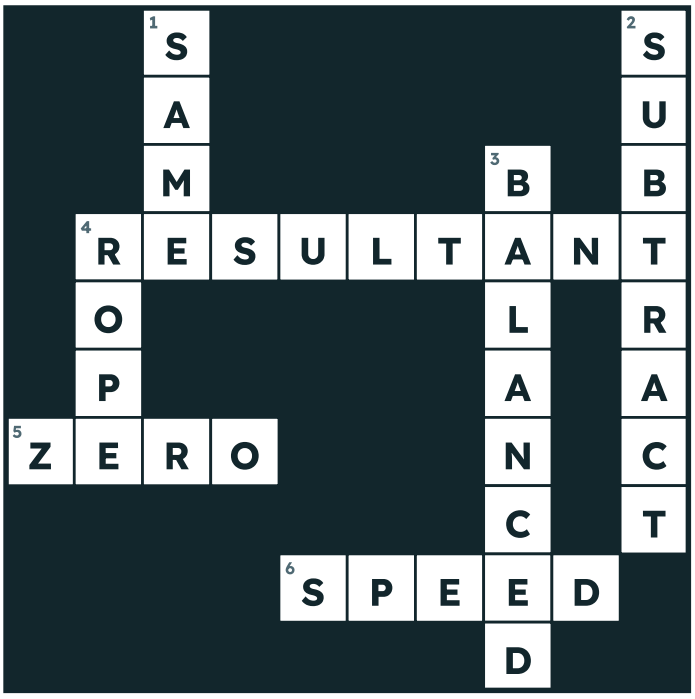
Answers

Word search



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

Crossword



Across

4 Resultant
The one overall force that all the forces on an object add up to (9)

5 Zero
Pull with 500 N one way and 500 N the other: the overall force is this (4)

6 Speed
Unbalanced forces change an object's direction or its ___ (5)

Down

1 Same
Forces in the ___ direction are added (4)

2 Subtract
What you do to two forces that act in opposite directions (8)

3 Balanced
Forces that cancel out (8)

4 Rope
Both teams pull on this in a tug of war (4)

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

KS3 PHYSICS · FORCES · LESSON 5

Friction

Word search

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

Find these 8 words

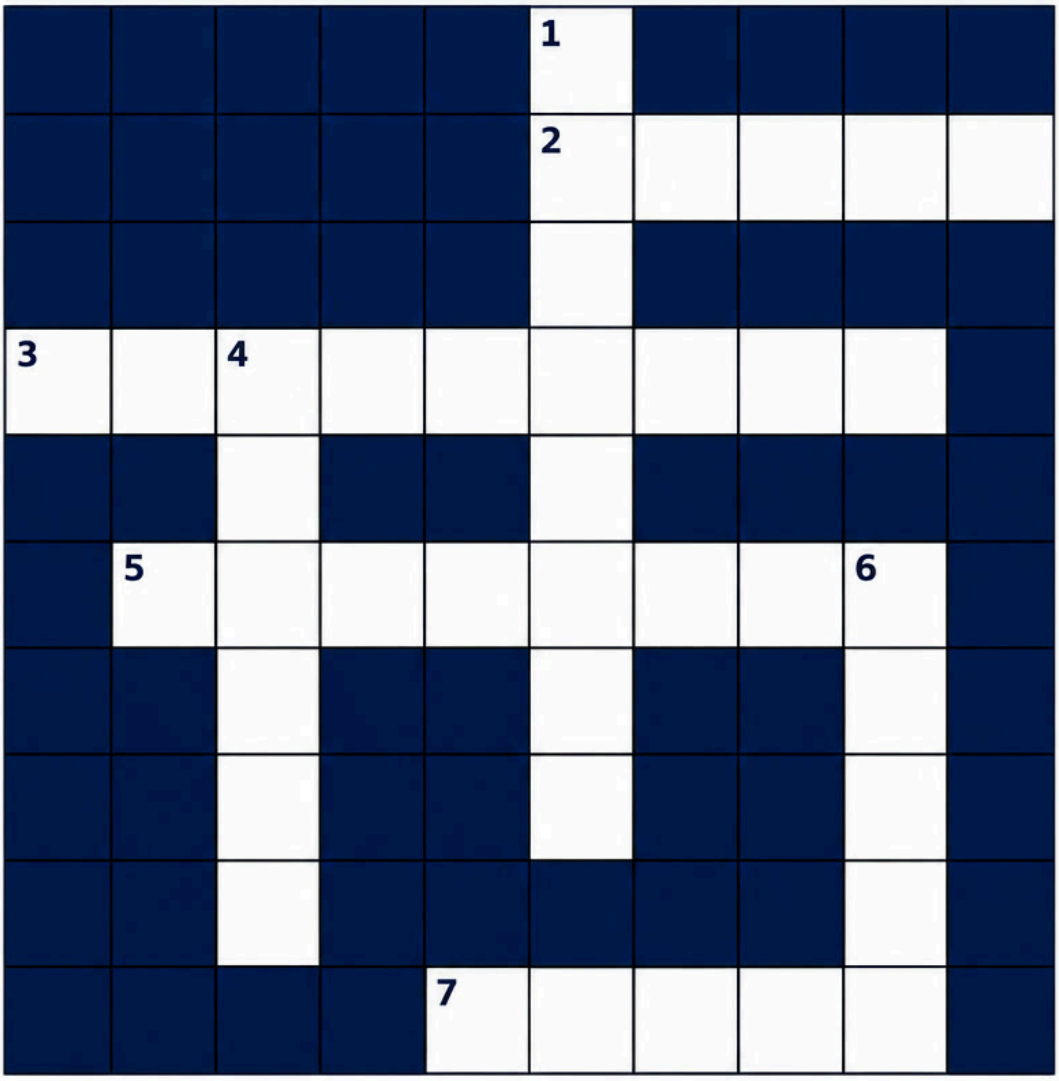
- ☐ BRAKES
- ☐ BUMPS
- ☐ FRICTION
- ☐ LUBRICANT
- ☐ MACHINES
- ☐ ROUGH
- ☐ SHOES
- ☐ TYRES

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

KS3 PHYSICS • FORCES • LESSON 5

Friction

Crossword



Across

2 Surfaces like this grip more (5)

3 Oil is one: it cuts down the grip between moving parts (9)

5 In these, the force between surfaces wears the moving parts and makes them hot (8)

7 Rubber rings round a bike's wheels that grip the road (5)

Down

1 The force between touching surfaces that acts against them rubbing past each other (8)

4 Grip between surfaces is useful in these, to slow a bike down (6)

6 Grip under these stops you slipping (5)

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

KS3 SCIENCE · PHYSICS · FORCES

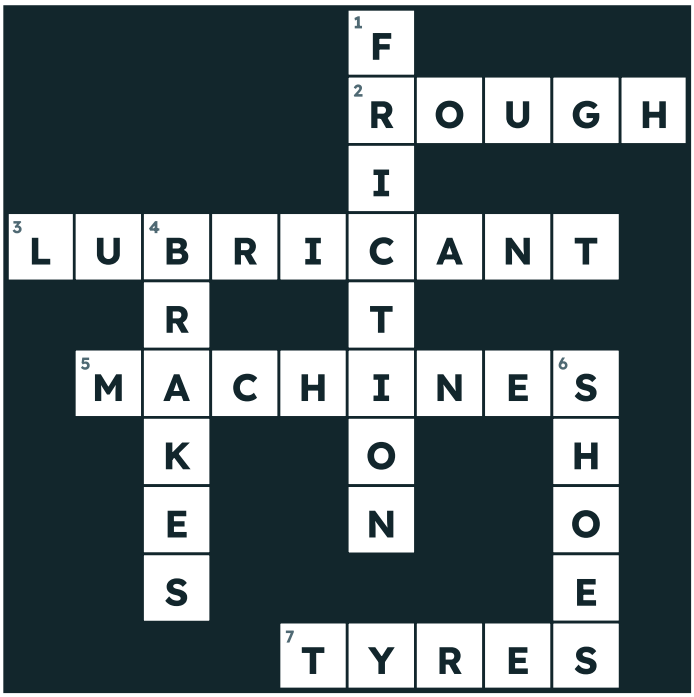
Lesson 5: Friction

Answers

Word search



Crossword



Across

2 Rough
Surfaces like this grip more (5)

3 Lubricant
Oil is one: it cuts down the grip between moving parts (9)

5 Machines
In these, the force between surfaces wears the moving parts and makes them hot (8)

7 Tyres
Rubber rings round a bike's wheels that grip the road (5)

Down

1 Friction
The force between touching surfaces that acts against them rubbing past each other (8)

4 Brakes
Grip between surfaces is useful in these, to slow a bike down (6)

6 Shoes
Grip under these stops you slipping (5)

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

KS3 PHYSICS · FORCES · LESSON 6

Air and water resistance

Word search

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

Find these 8 words

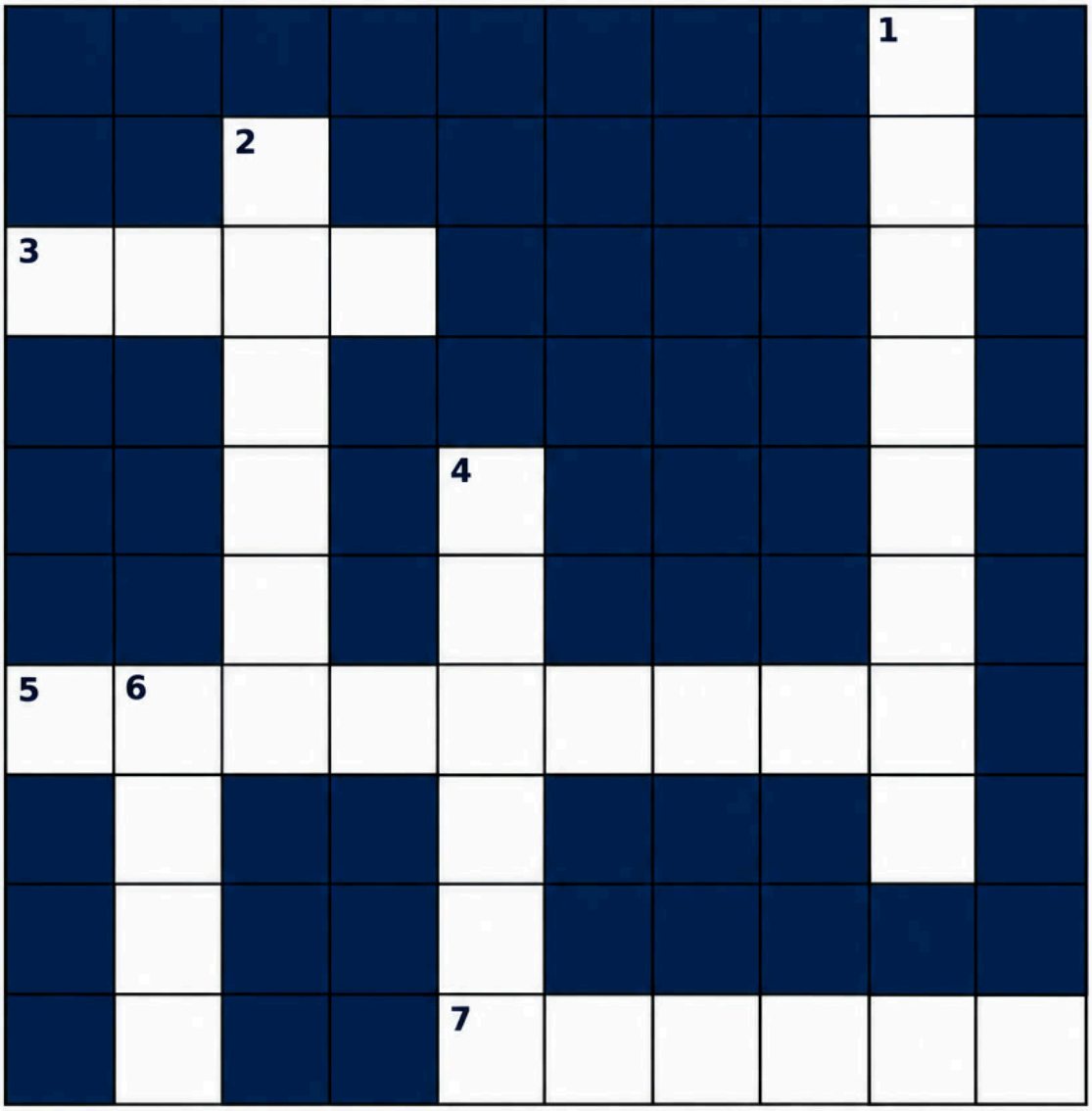
- ☐ AREA
- ☐ DOLPHIN
- ☐ DRAG
- ☐ FASTER
- ☐ PARACHUTE
- ☐ SKYDIVER
- ☐ STREAMLINED
- ☐ VACUUM

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

KS3 PHYSICS · FORCES · LESSON 6

Air and water resistance

Crossword



Across

3 Air resistance and water resistance are both called this (4)

5 It slows a falling person down (9)

7 Air resistance acts against this (6)

Down

1 A person who jumps from a plane and falls through the air (8)

2 The ___ you go, the bigger the air resistance (6)

4 There is no air here, so there is no air resistance (6)

6 The amount of surface facing the air: the bigger it is, the more air resistance (4)

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

KS3 SCIENCE · PHYSICS · FORCES

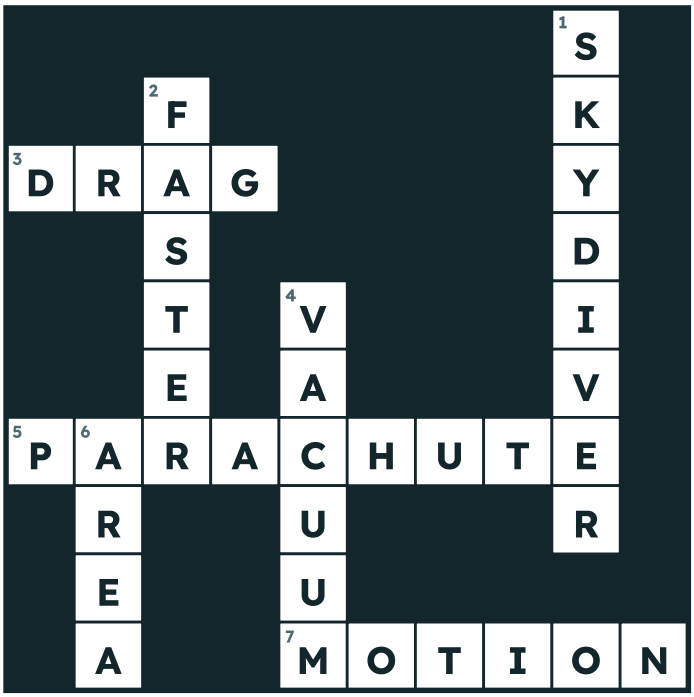
Lesson 6: Air and water resistance

Answers

Word search



Crossword



Across

3 Drag
Air resistance and water resistance are both called this (4)

5 Parachute
It slows a falling person down (9)

7 Motion
Air resistance acts against this (6)

Down

1 Skydiver
A person who jumps from a plane and falls through the air (8)

2 Faster
The ___ you go, the bigger the air resistance (6)

4 Vacuum
There is no air here, so there is no air resistance (6)

6 Area
The amount of surface facing the air: the bigger it is, the more air resistance (4)

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

KS3 PHYSICS · FORCES · LESSON 7

Forces and motion

Word search

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

Find these 8 words

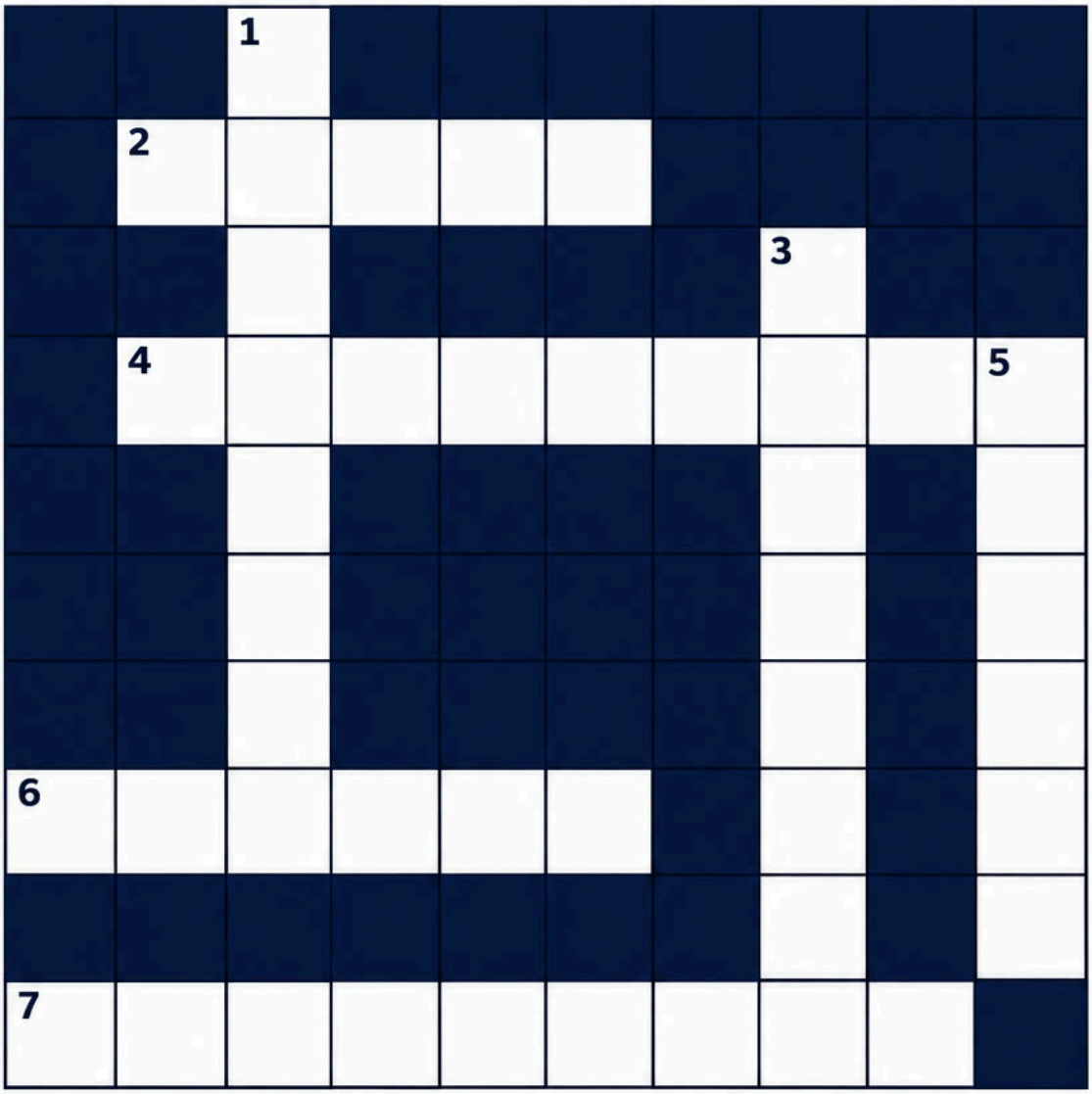
- ☐ BALANCED
- ☐ FORWARDS
- ☐ FRICTION
- ☐ MOTION
- ☐ RESULTANT
- ☐ STEADY
- ☐ STILL
- ☐ STRAIGHT

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

KS3 PHYSICS · FORCES · LESSON 7

Forces and motion

Crossword



Across

2 A parked car with no overall force on it stays ___ (5)

4 A car drives ahead. An overall force pointing this way slows it down (9)

6 How an object moves (6)

7 The one overall force on an object (9)

Down

1 With no overall force, a moving object keeps going in a ___ line (8)

3 So little of it on smooth ice that a stone slides a long way (8)

5 With no overall force, a moving object keeps going at a ___ speed (6)

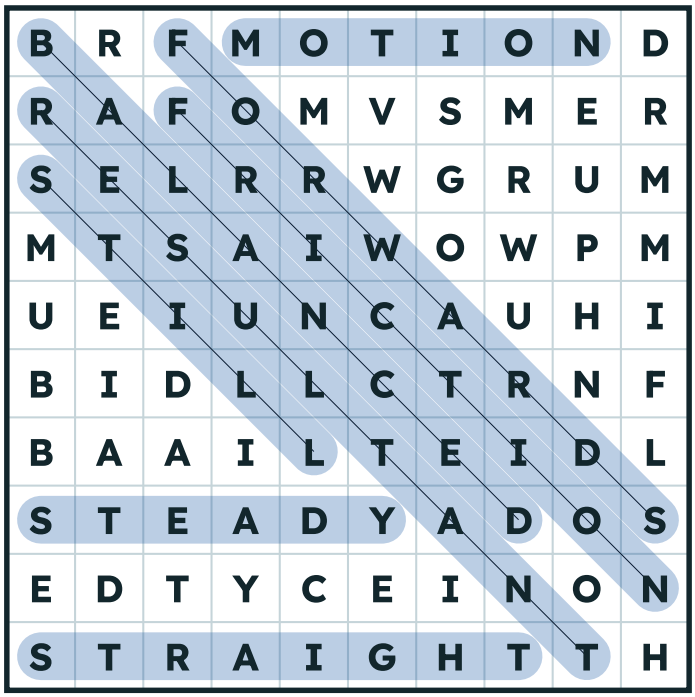
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · FORCES

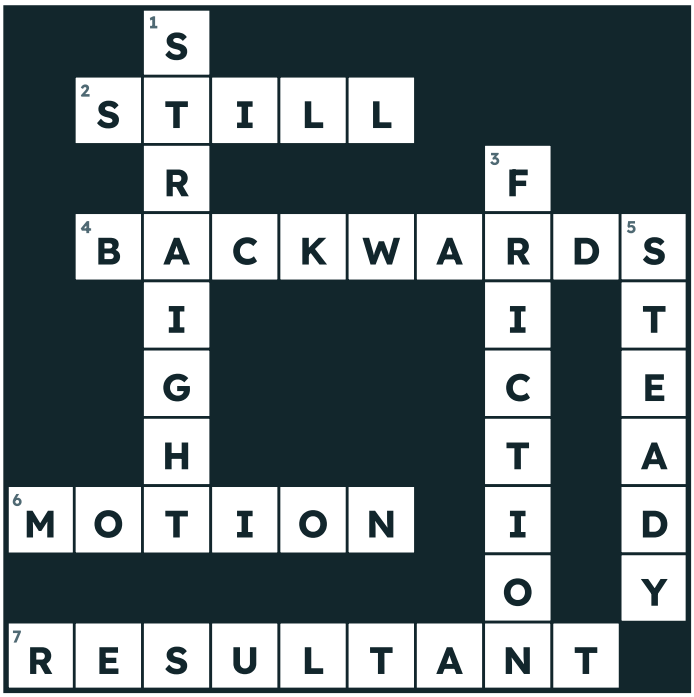
Lesson 7: Forces and motion

Answers

Word search



Crossword



Across

2 Still
A parked car with no overall force on it stays ___ (5)

4 Backwards
A car drives ahead. An overall force pointing this way slows it down (9)

6 Motion
How an object moves (6)

7 Resultant
The one overall force on an object (9)

Down

1 Straight
With no overall force, a moving object keeps going in a ___ line (8)

3 Friction
So little of it on smooth ice that a stone slides a long way (8)

5 Steady
With no overall force, a moving object keeps going at a ___ speed (6)

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