KS3 SCIENCE • PHYSICS

Gravity and space

Word search

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

Find these 10 words

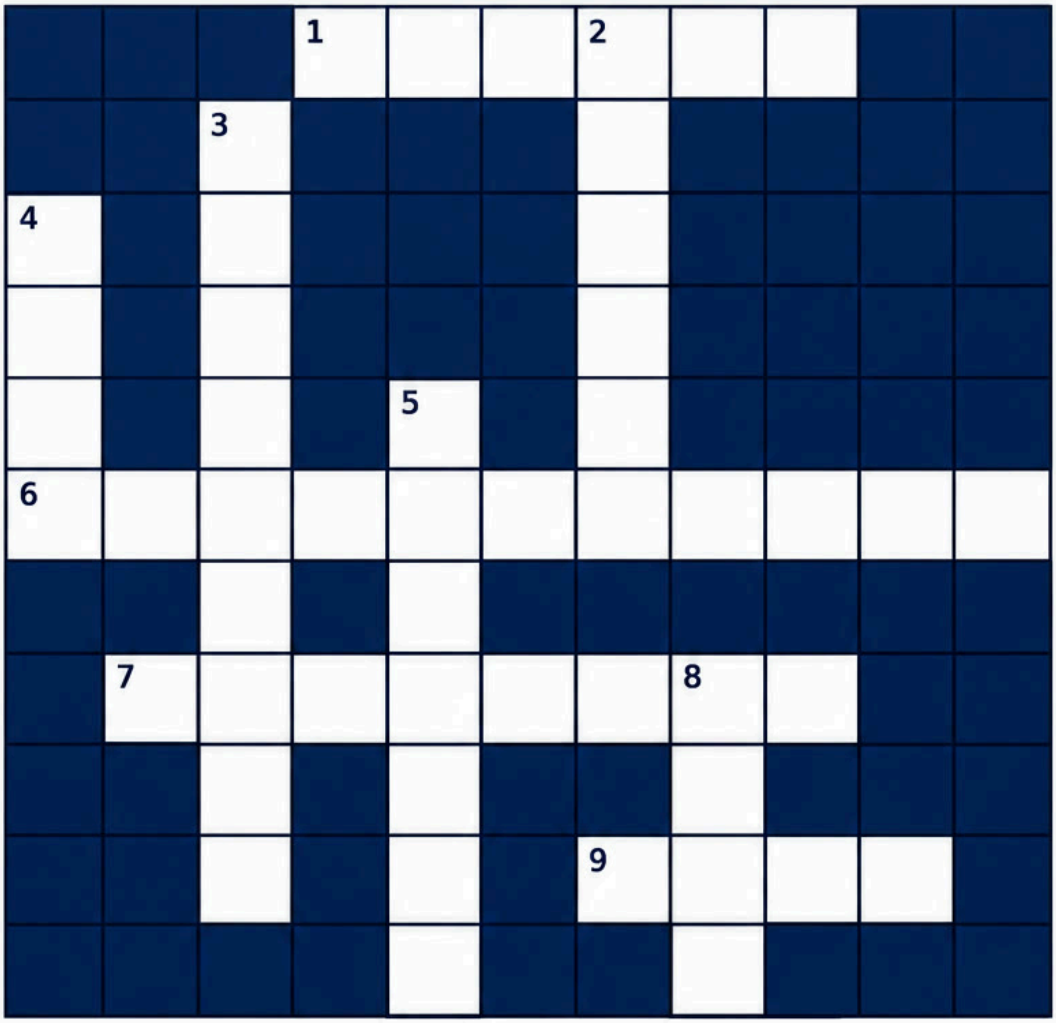
- ☐ AXIS
- ☐ EXOPLANET
- ☐ GRAVITY
- ☐ MASS
- ☐ MILKY WAY
- ☐ ORBIT
- ☐ STAR
- ☐ UNIVERSE
- ☐ WEIGHT
- ☐ YEAR

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

KS3 SCIENCE · PHYSICS

Gravity and space

Crossword



Across

1 The force of gravity on an object, measured in newtons (6)

6 The Sun and everything that orbits it (5,6)

7 Everything that exists, including all the galaxies (8)

9 The amount of matter in an object, measured in kilograms (4)

Down

2 A huge collection of stars, gas and dust, held together by gravity (6)

3 A planet that orbits a star outside our solar system (9)

4 The imaginary line through the poles that the Earth spins around (4)

5 A force that pulls any two objects towards each other (7)

8 A huge ball of hot gas that gives out its own light (4)

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

KS3 SCIENCE · PHYSICS

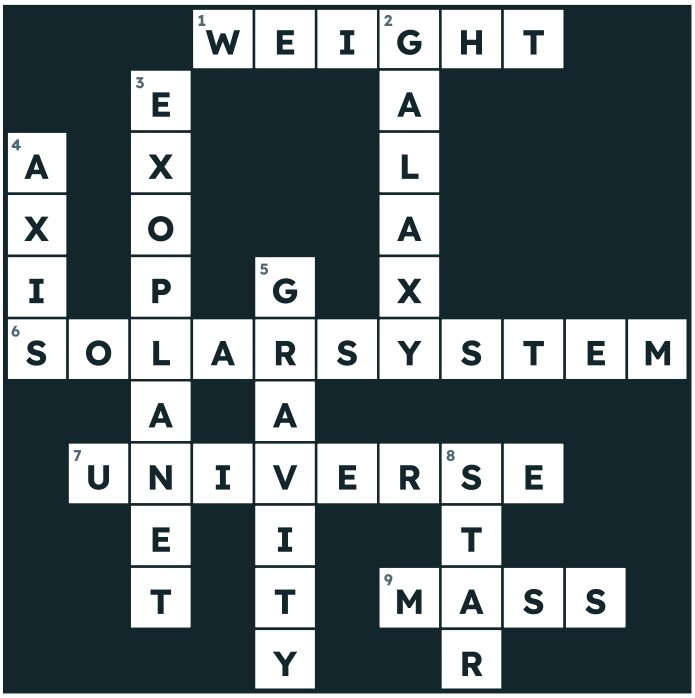
Gravity and space

Answers

Word search

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

Crossword



Across

1 Weight
The force of gravity on an object, measured in newtons (6)

6 Solar system
The Sun and everything that orbits it (5,6)

7 Universe
Everything that exists, including all the galaxies (8)

9 Mass
The amount of matter in an object, measured in kilograms (4)

Down

2 Galaxy
A huge collection of stars, gas and dust, held together by gravity (6)

3 Exoplanet
A planet that orbits a star outside our solar system (9)

4 Axis
The imaginary line through the poles that the Earth spins around (4)

5 Gravity
A force that pulls any two objects towards each other (7)

8 Star
A huge ball of hot gas that gives out its own light (4)

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 1

Mass and weight

Word search

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

Find these 8 words

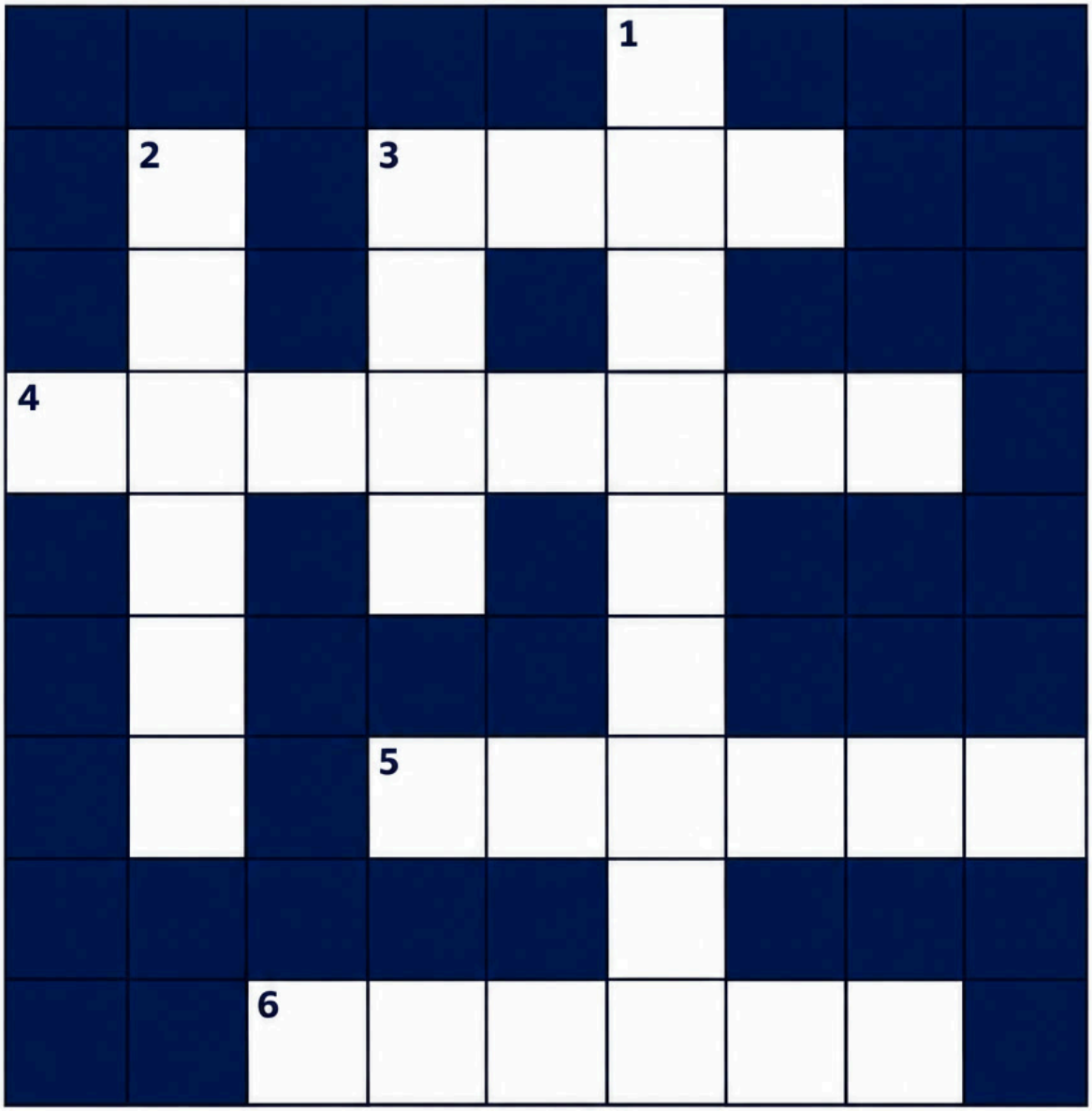
- ☐ FORCE
- ☐ KILOGRAM
- ☐ MASS
- ☐ MATTER
- ☐ MOON
- ☐ NEWTON
- ☐ WEAKER
- ☐ WEIGHT

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 1

Mass and weight

Crossword



Across

3 The amount of stuff in an object, measured in kg (4)

4 What kg stands for (8)

5 Less strong (6)

6 The stuff an object is made of (6)

Down

1 A person who travels into space (9)

2 The pull of a planet on an object, measured in N (6)

3 The Earth's neighbour in space, where everything weighs less (4)

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

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

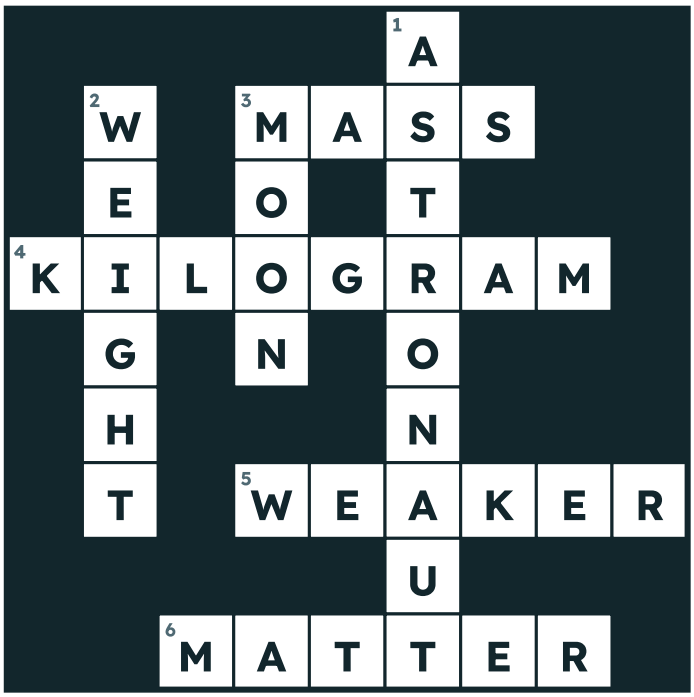
Lesson 1: Mass and weight

Answers

Word search

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

Crossword



Across

3 Mass
The amount of stuff in an object, measured in kg (4)

4 Kilogram
What kg stands for (8)

5 Weaker
Less strong (6)

6 Matter
The stuff an object is made of (6)

Down

1 Astronaut
A person who travels into space (9)

2 Weight
The pull of a planet on an object, measured in N (6)

3 Moon
The Earth's neighbour in space, where everything weighs less (4)

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 2

Calculating weight

Word search

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

Find these 8 words

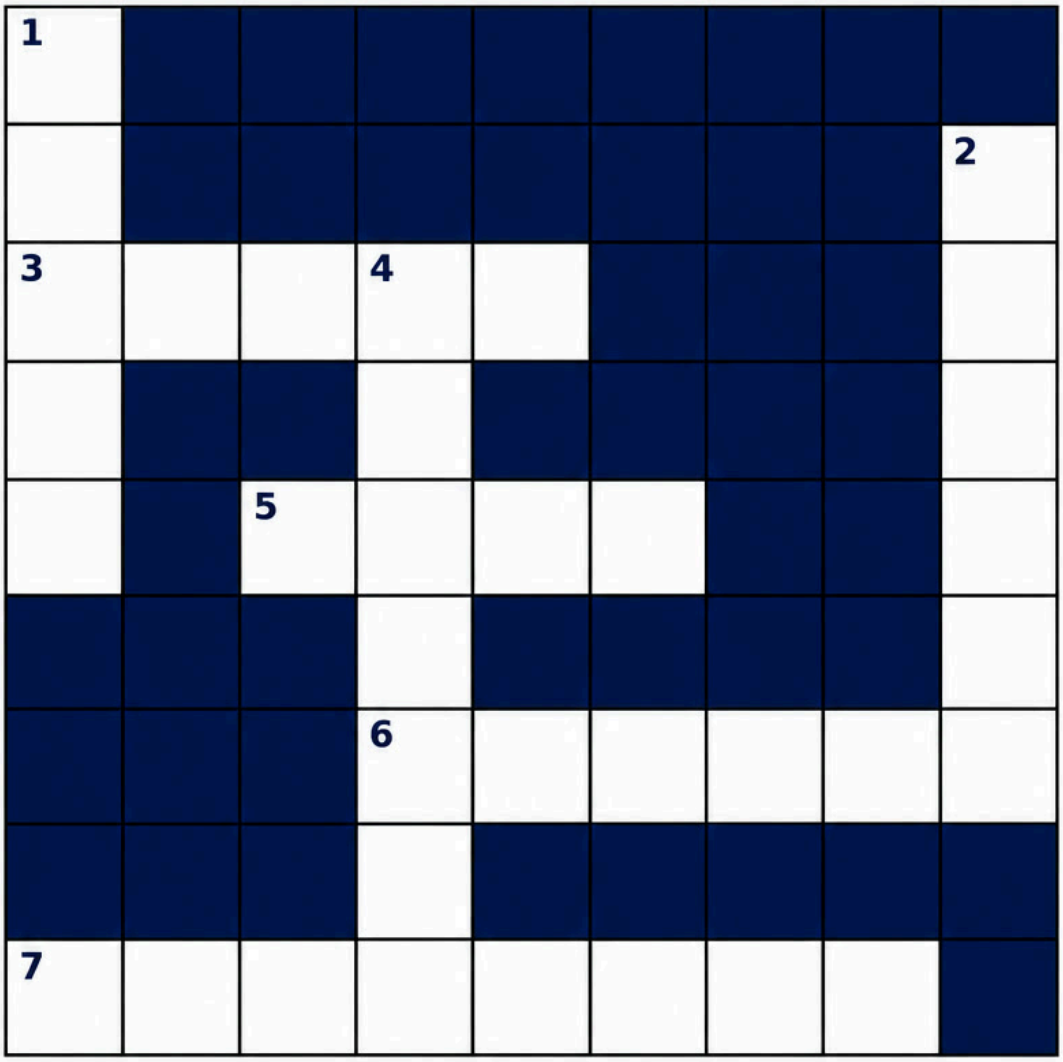
- ☐ EARTH
- ☐ EXAMPLE
- ☐ MASS
- ☐ MOON
- ☐ MULTIPLY
- ☐ PLANET
- ☐ ROVER
- ☐ WEIGHT

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 2

Calculating weight

Crossword



Across

3 A wheeled vehicle that explores Mars (5)

5 The amount of matter, measured in kg (4)

6 Mars and Jupiter are each one (6)

7 Gravitational field ___ is how hard gravity pulls on each kilogram (8)

Down

1 On this, g is about 10 N/kg (5)

2 The force of gravity on an object, measured in N (6)

4 A model calculation that shows the method (7)

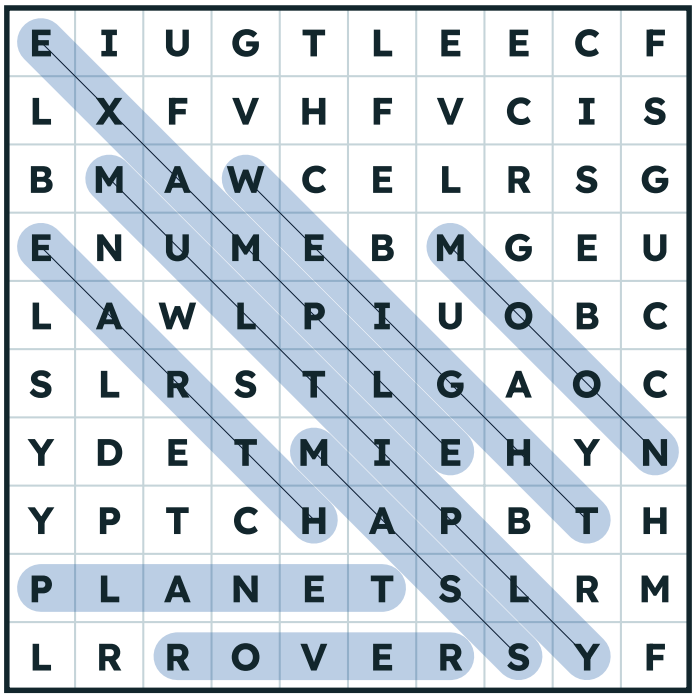
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

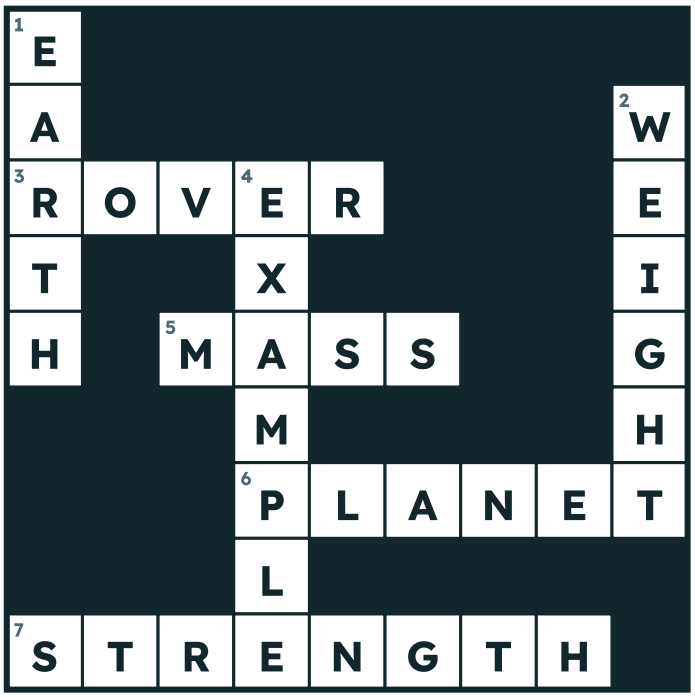
Lesson 2: Calculating weight

Answers

Word search



Crossword



Across

3 Rover
A wheeled vehicle that explores Mars (5)

5 Mass
The amount of matter, measured in kg (4)

6 Planet
Mars and Jupiter are each one (6)

7 Strength
Gravitational field ___ is how hard gravity pulls on each kilogram (8)

Down

1 Earth
On this, g is about 10 N/kg (5)

2 Weight
The force of gravity on an object, measured in N (6)

4 Example
A model calculation that shows the method (7)

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 3

Gravity and orbits

Word search

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

Find these 8 words

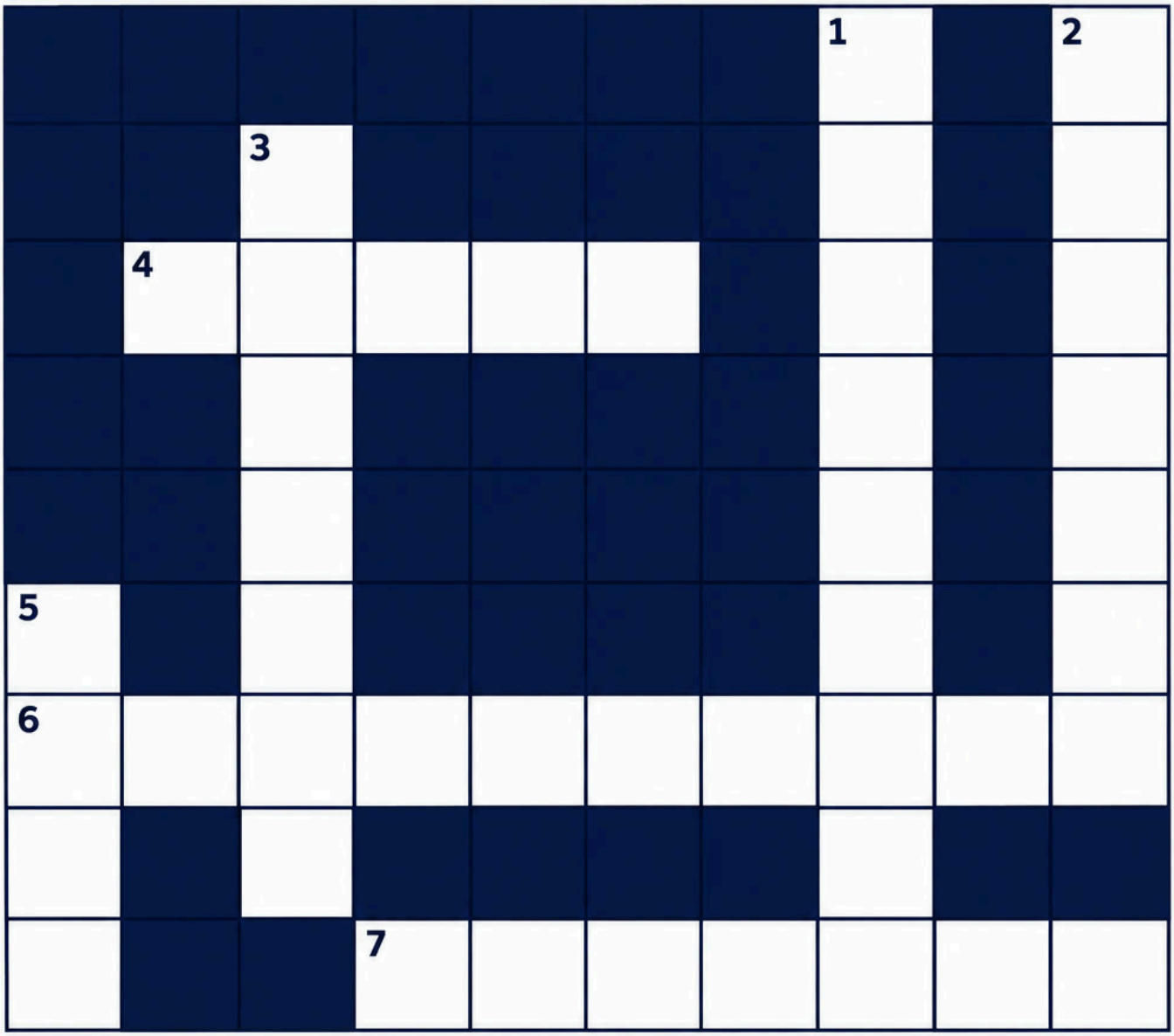
- ☐ ARTIFICIAL
- ☐ DISTANCE
- ☐ GRAVITY
- ☐ MASS
- ☐ NATURAL
- ☐ ORBIT
- ☐ SIGNALS
- ☐ WEATHER

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 3

Gravity and orbits

Crossword



Across

4 The curved path of a moon round a planet (5)

6 Made by people, not found in nature (10)

7 Large worlds that go round the Sun (7)

Down

1 A machine or moon that circles a bigger body (9)

2 Found in nature, like the Moon (7)

3 The pull between all objects (7)

5 More of this means more pull (4)

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

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

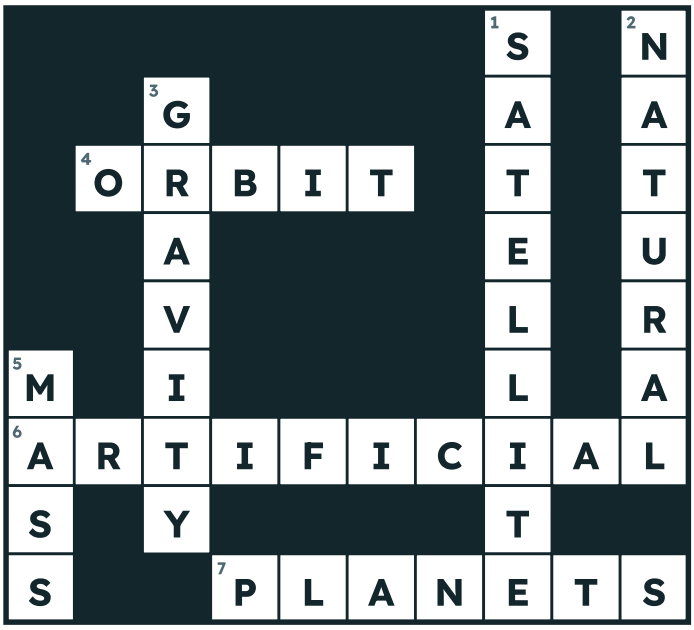
Lesson 3: Gravity and orbits

Answers

Word search

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

Crossword



Across

4 Orbit
The curved path of a moon round a planet (5)

6 Artificial
Made by people, not found in nature (10)

7 Planets
Large worlds that go round the Sun (7)

Down

1 Satellite
A machine or moon that circles a bigger body (9)

2 Natural
Found in nature, like the Moon (7)

3 Gravity
The pull between all objects (7)

5 Mass
More of this means more pull (4)

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 4

The Sun, stars and galaxies

Word search

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

Find these 8 words

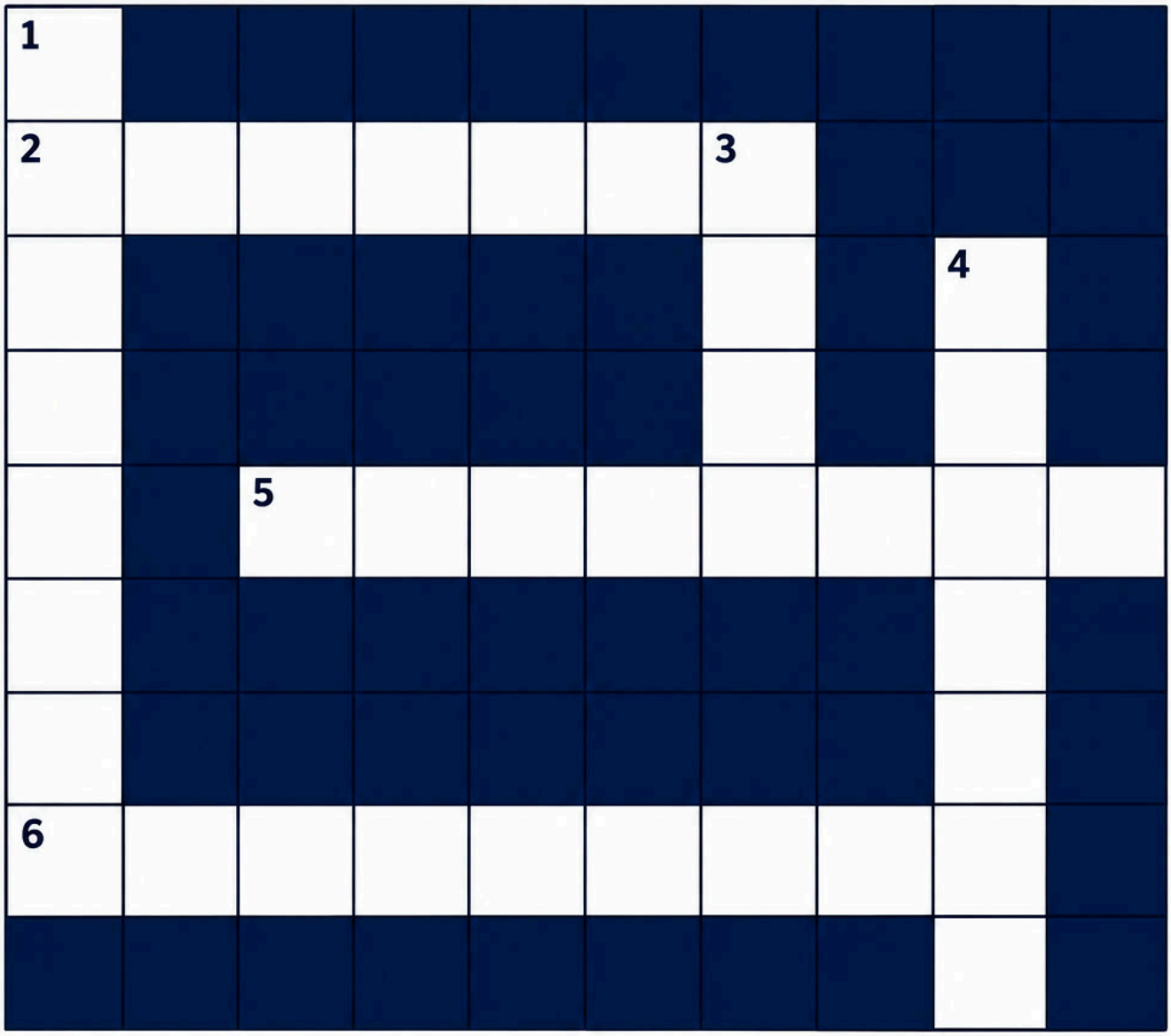
- ☐ EXOPLANET
- ☐ MILKY WAY
- ☐ NEAREST
- ☐ PLANETS
- ☐ REFLECT
- ☐ SOLAR SYSTEM
- ☐ TINY
- ☐ UNIVERSE

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 4

The Sun, stars and galaxies

Crossword



Across

2 Another word for closest: the Sun is our ___ star (7)

5 The name of the huge collection of stars, gas and dust that holds the Sun (5,3)

6 A world that orbits a star other than the Sun (9)

Down

1 Everything that exists (8)

3 Other stars look this size because they are so far away (4)

4 Earth is one of eight of these that orbit the Sun (7)

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

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

Lesson 4: The Sun, stars and galaxies

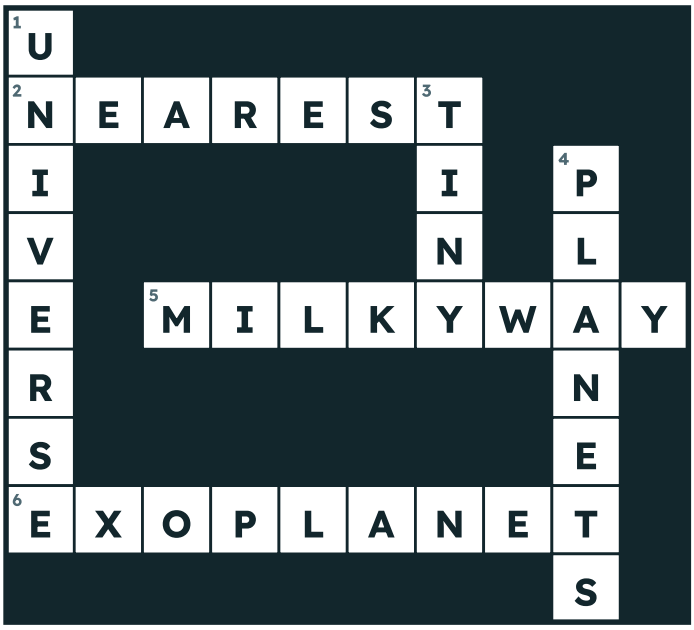
Answers

Word search



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

Crossword



Across

2 Nearest
Another word for closest: the Sun is our ___ star (7)

5 Milky Way
The name of the huge collection of stars, gas and dust that holds the Sun (5,3)

6 Exoplanet
A world that orbits a star other than the Sun (9)

Down

1 Universe
Everything that exists (8)

3 Tiny
Other stars look this size because they are so far away (4)

4 Planets
Earth is one of eight of these that orbit the Sun (7)

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 5

Days, years and seasons

Word search

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

Find these 8 words

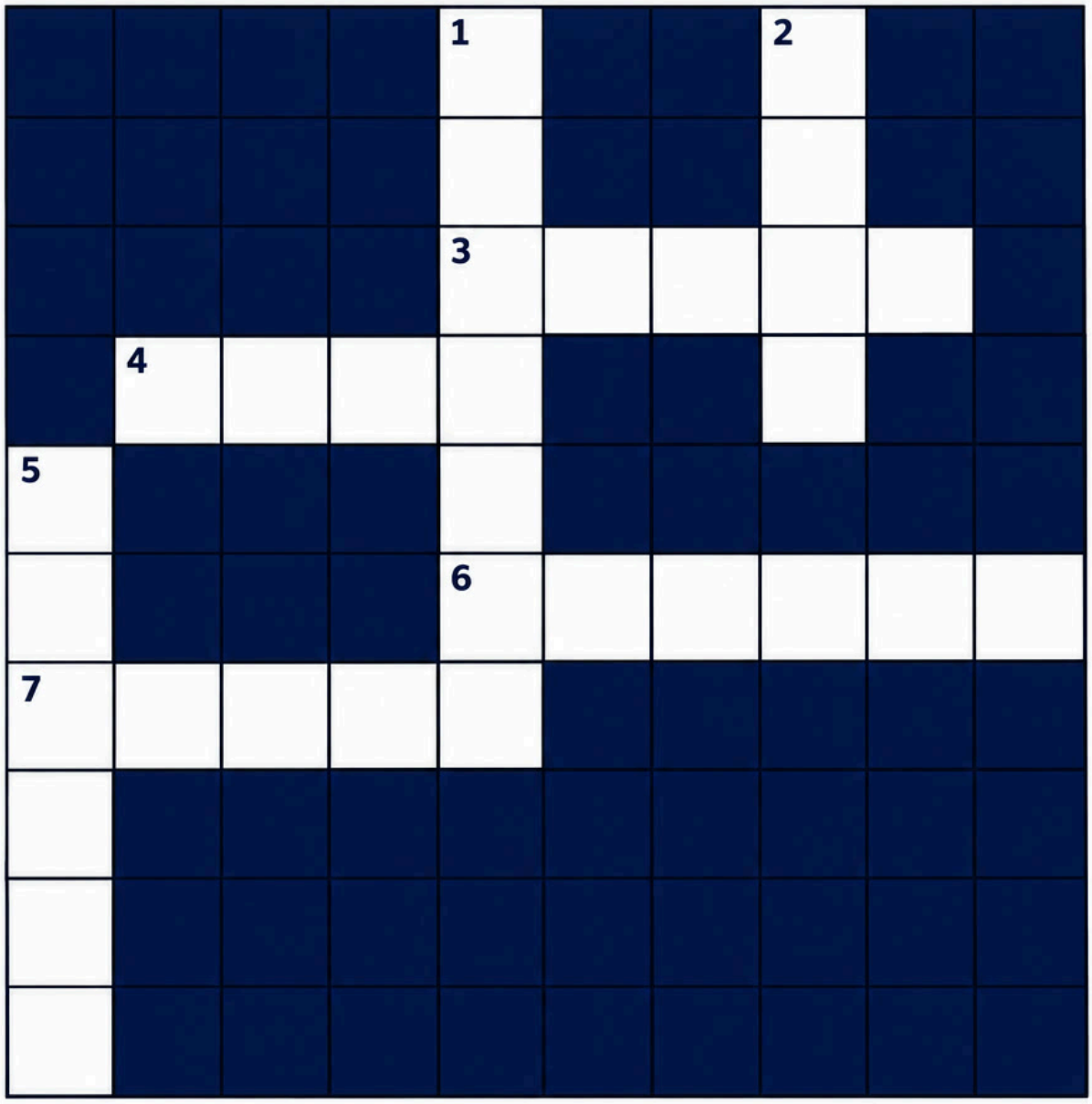
- ☐ AXIS
- ☐ CLOSEST
- ☐ NIGHT
- ☐ ORBIT
- ☐ SEASONS
- ☐ SPIN
- ☐ SUMMER
- ☐ TILTED

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 5

Days, years and seasons

Crossword



Across

3 The Earth's journey once round the Sun takes a year (5)

4 The imaginary line through the poles (4)

6 In June the north leans towards the Sun and the UK has this (6)

7 The half of the Earth facing away from the Sun has this (5)

Down

1 Nearest: the Earth is ___ to the Sun at one time of year (7)

2 Another word for turn: the Earth does this once every 24 hours (4)

5 In December the north leans away from the Sun, and the UK has this (6)

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

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

Lesson 5: Days, years and seasons

Answers

Word search



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

Crossword



Across

3 Orbit
The Earth's journey once round the Sun takes a year (5)

4 Axis
The imaginary line through the poles (4)

6 Summer
In June the north leans towards the Sun and the UK has this (6)

7 Night
The half of the Earth facing away from the Sun has this (5)

Down

1 Closest
Nearest: the Earth is ___ to the Sun at one time of year (7)

2 Spin
Another word for turn: the Earth does this once every 24 hours (4)

5 Winter
In December the north leans away from the Sun, and the UK has this (6)

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

KS3 PHYSICS • GRAVITY AND SPACE • LESSON 6

Light years

Word search

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

Find these 8 words

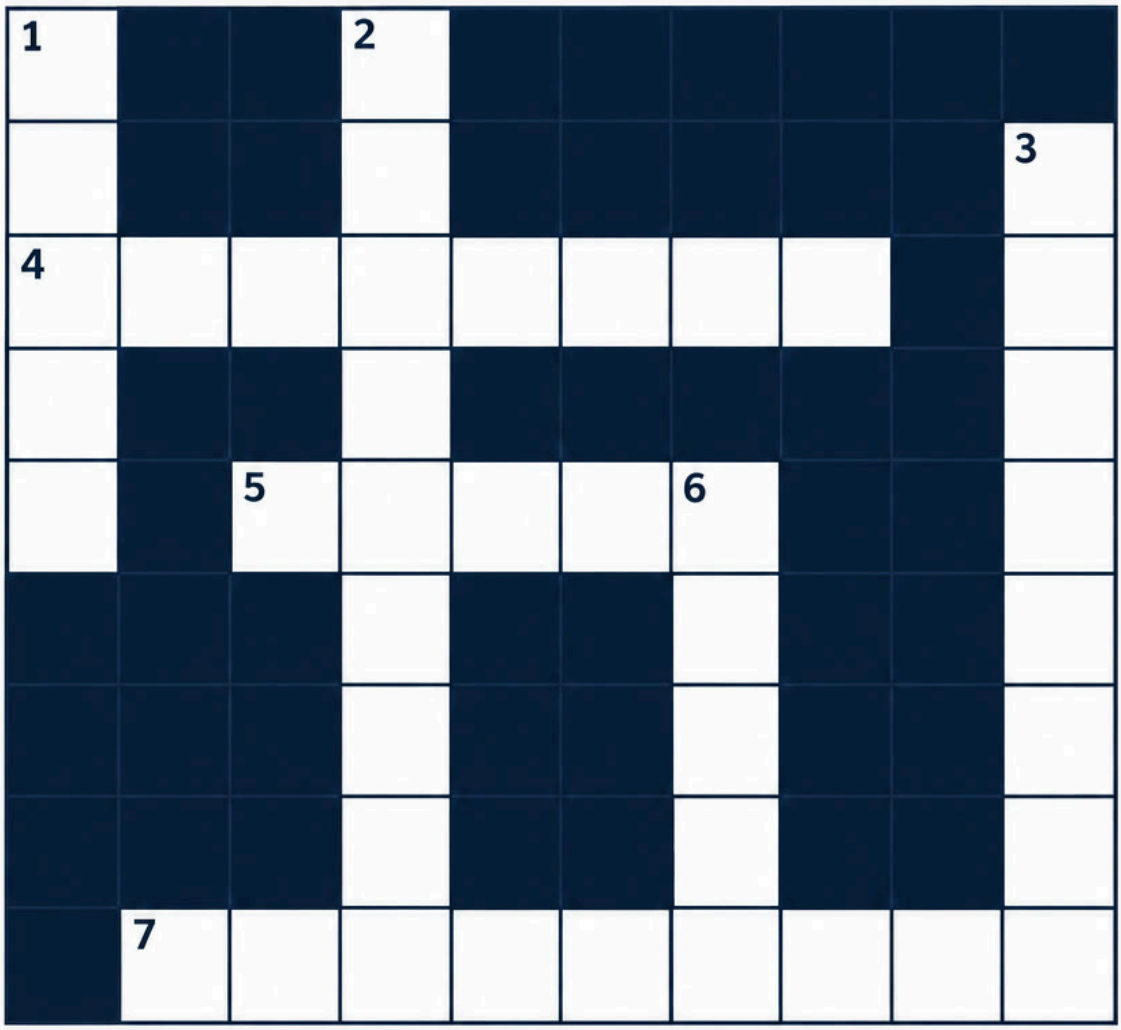
- ☐ DISTANCE
- ☐ GALAXIES
- ☐ KILOMETRE
- ☐ LIGHT
- ☐ MILLION
- ☐ MINUTES
- ☐ SPACE
- ☐ YEAR

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

KS3 PHYSICS · GRAVITY AND SPACE · LESSON 6

Light years

Crossword



Across

4 The Milky Way is one of many of these (8)

5 Huge hot balls of gas that shine, like the Sun (5)

7 What km stands for (9)

Down

1 Travels at 300 000 km every second (5)

2 Easy and sensible to use (9)

3 How far away something is (8)

6 The vast region beyond the Earth that holds the Sun and other objects (5)

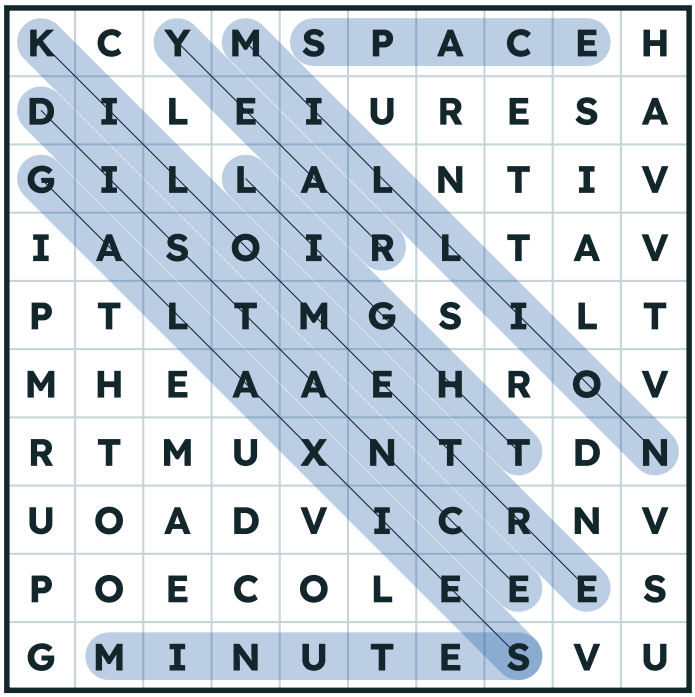
The number in brackets is how many letters the answer has.

KS3 SCIENCE · PHYSICS · GRAVITY AND SPACE

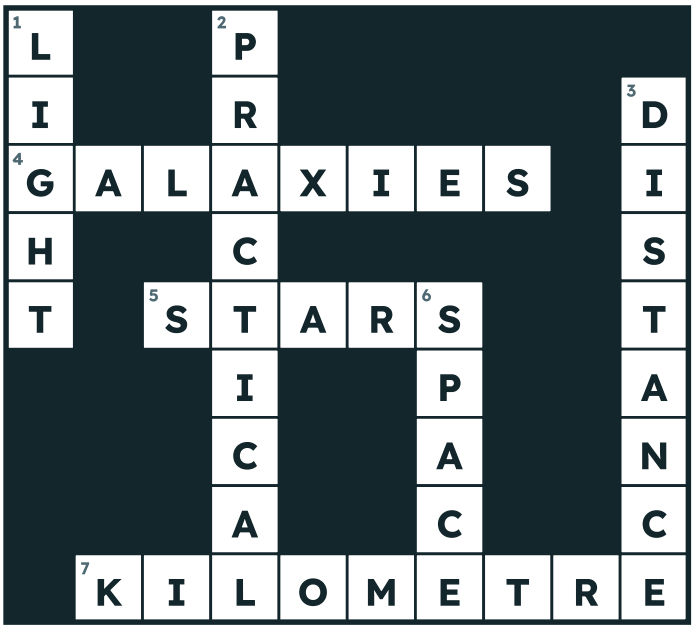
Lesson 6: Light years

Answers

Word search



Crossword



Across

4 Galaxies
The Milky Way is one of many of these (8)

5 Stars
Huge hot balls of gas that shine, like the Sun (5)

7 Kilometre
What km stands for (9)

Down

1 Light
Travels at 300 000 km every second (5)

2 Practical
Easy and sensible to use (9)

3 Distance
How far away something is (8)

6 Space
The vast region beyond the Earth that holds the Sun and other objects (5)

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