

## 2 Properties

- 1 Find the names of 14 materials in the puzzle and circle them. The words go vertically from top to bottom, and sideways from left to right. No words go diagonally.

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

- 2 Underline the two correct adjectives for each material.
- 1 A ceramic cup is flexible/heat-resistant and hard/soft.
  - 2 A concrete floor is rigid/flexible and brittle/tough.
  - 3 A rubber tyre is rigid/flexible and weak/strong.
  - 4 A fibreglass window frame is heat-resistant/soft and rigid/flexible.
  - 5 A nylon rope is rigid/flexible and strong/weak.
  - 6 The graphite in the middle of a pencil is light/heavy and hard/soft.
  - 7 A polycarbonate road sign is rigid/flexible and strong/weak.
  - 8 A polystyrene coffee cup is brittle/tough and heavy/light.

- 3 Design a plane. Choose one material for each part of the plane.

1 (nose cone / plastic / aluminium)

*The nose cone is made of aluminium.*

2 (wheels / fibreglass / aluminium alloy)

3 (tyres / ceramic / rubber composite)

4 (frame / composite / polystyrene)

5 (inside / fibreglass / rubber composite)

6 (seats / plastic / ceramic)

7 (engine / fibreglass / aluminium alloy)

8 (wings / aluminium alloy / plastic)

