

## What is behind the rainbow? - Solutions

## B. The correct answers are:

- 1. Light rays travel as simple straight lines. They are not waves! This is **false**.
- 2. Rays of light coming from the sun or a lamp travel in a certain direction. But as soon as they hit an object, they are either taken up or redirected in another direction. This is **true**.
- 3. **Isaac Newton** was an English natural scientist and was the first to show that white light consists of all the colors of the visible spectrum.
  - **Charles Darwin** was a British natural scientist and is seen as the father of the theory of evolution.
  - **Albert Einstein** was a German physicist and became world-famous through the theory of relativity.
- 4. The 7 spectral colors are: **Red**, **orange**, **yellow**, **green**, **cyan**, **blue** and **violet**.
- 5. Here you find the completed text:
- 6. When light rays from the sun hit water drops a rainbow occurs. In the water drop the light is refracted. This means, that the rays are redirected. They can no longer travel straight ahead. Also, the rays are split in their components. These components are called spectral colors. Light refraction happens in many water drops. Through this we can see a rainbow!

## C. You find the hidden words here:

Е	У	R	S	I	W	I	Е	A	Т	У	5	R	М	R	A	G	z	P	Н
F	D	M	н	W	z	н	0	Т	D	N	н	L	w	D	A	w	G	F	Т
Q	×	C	G	Т	R	W	J	W	Н	0	D	C	A	R	F	1	Z	Н	Z
Е	×	I	Н	Е	L	Р	K	F	С	M	C	Т	٧	A	Т	L	N	У	Т
Т	5	Е	K	Т	У	1	D	0	I	X	G	N	Ε	E	Т	W	F	Н	Т
U	E	P	U	A	Z	P	G	I	×	Z	В	F	L	У	K	A	P	G	0
G	S	L	E	Q	L	С	Z	Н	U	Q	D	٧	Е	T	I	w	٧	Н	Z
В	×	S	G	C	I	Е	U	G	Т	S	Т	A	N	Н	E	0	L	5	0
N	K	5	M	Q	Т	5	1	٧	У	R	٧	У	G	G	М	В	F	R	F
0	L	Т	5	U	Н	R	E	D	I	R	E	С	т	I	0	N	M	0	M
Т	R	I	Α	Р	С	z	A	G	0	J	N	F	н	L	Т	I	G	L	G
W	D	K	J	J	J	٧	Α	L	J	5	P	٧	R	Z	D	A	I	0	I
Е	L	E	٧	W	В	E	В	A	C	Q	С	A	٧	A	Z	R	A	С	Q
N	Н	A	Р	G	×	F	R	L	С	0	5	0	В	G	c	U	M	Q	Z
С	Н	P	Т	Р	K	G	Т	0	Z	С	L	U	Р	G	Т	Т	5	Α	M
A	R	5	K	В	L	U	G	I	D	I	J	0	N	E	A	R	I	5	У
A	C	5	Α	A	Е	L	U	z	U	L	Е	G	R	R	W	М	R	0	F
5	2	F	Р	В	R	С	M	5	Р	R	J	N	F	5	Α	D	P	У	N
I	0	٧	w	Α	В	N	K	У	I	R	У	Т	В	5	У	У	R	В	A
Р	J	Z	M	G	z	Т	L	Q	R	R	٧	J	5	F	В	С	Q	0	I