

## S-FIELD METALS AND THEIR COMPOUNDS

I. What materials do you think the statements below relate to? Answer with their chemical symbols!



	Statements	Answer
1.	Its atomic number is 19, the lack of it can cause muscle weakness and fatigue.	
2.	One of the cations that causes the hardness of water, and is useful to overcome stress.	
3.	Its atom has one valence electron, and helps to decrease blood pressure.	
4.	Its common name is Glauber salt, used as a laxative.	
5.	This salt is dissolved in the isotonic salt solution, which is used in infusion.	
6.	It is a remedy used to cure heartburn and also used as baking powder.	
7.	The lack of this two positive ion containing 18 electrons, causes tooth decay and osteoporosis	
8.	These ions containing 20 protons help the absorption of iron ions.	
9.	An element located in the second column plays a role in the prevention of inflammations and allergies.	
10.	Its common name is Epson salt, it dissolves in water and it is a laxative.	
11.	Talcum powder of gymnasts, used also for preparation of refractory bricks, and it is good to cure heartburn.	

II. Write a letter „T” if the statement is true, and a letter „F” if it is false!

	Statement	Answer
1.	There is a lot of potassium in bacon.	
2.	Potassium and sodium ions are not important in the regulation of heart beat control.	
3.	A sufficient amount of sodium ions in the body decreases the thermal fatigue and prevents sunstroke.	
4.	Dairy products contain plenty of magnesium.	
5.	Tomato, banana, potato and pumpkin seed are good sources of potassium.	
6.	Calcium ions are good protectors in case of a heart attack.	
7.	Strontium ions are important in overcoming depression.	
8.	Stress, physical and mental work and alcohol consumption reduce the amount of magnesium ions in the body.	
9.	Plenty of magnesium can be found in peas, apple, walnut and almond.	
10.	An appropriate amount of magnesium is required in the proper calcium, sodium, potassium, and phosphorus balance, and vitamin C metabolism.	
11.	Sugar, spinach and sorrel consumption helps absorption of calcium compounds.	
12.	Plaster when mixed with water releases some heat and increases volume, gains missing water of crystallisation, and solidifies. This material is used for fixing the broken limbs.	
13.	One of the natural sources of calcium compounds is bean.	
14.	The s-field metals occur only in covalent bonds in living organisms.	

## Solution

I.

1	2	3	4	5	6	7	8	9	10	11
K	Mg <sup>2+</sup>	K	Na <sub>2</sub> SO <sub>4</sub>	NaCl	NaHCO <sub>3</sub>	Ca <sup>2+</sup>	Ca <sup>2+</sup>	Ca	MgSO <sub>4</sub>	MgO

II.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
F	F	T	F	T	F	F	T	T	T	F	T	T	F