



GYMNÁZIUM SOBRANCE

Projekt Erasmus Plus KA 101

Inovativnosť a flexibilita - záruka kvality vzdelávania

Pracovný list

Predmet: chémia
Názov tematického celku: Spoznávame chemické reakcie v našom okolí
Názov učebnej látky: Chemické zlučovanie
Trieda: sekunda
Dátum: 6. 8. 2019

Worksheet

Lesson: Chemical synthesis of iron and sulfur

Few question for begining?

What is iron?
What is sulfur?
What's mean synthesis?
What is product of this reaction?

Iron

is a [chemical element](#) with symbol **Fe**. It is a [metal](#) and it is the fourth most common [element in the Earth's crust](#). It is a heavy malleable ductile magnetic silver-white metallic element. Iron powder is grey.

Sulfur

is a chemical element with symbol **S**. It is a non-metal and a bright yellow crystalline solid which is insoluble in water. Sulphur burns in air with a bright blue flame to produces sulfur dioxide which is toxic and use to disinfection against bacteria or fungi.

What we will need?

- Test tube
- Burner
- Chemical spoon
- Porcelain bowl
- Test tube holder
- Magnet
- Petri dish
- sulfur powder
- iron powder

Instructions

1. 2 grams of sulfur powder mix with 3,5 grams of iron
2. Spatula the iron/sulfur mixture into a test tube
3. Heat it with flame of burner
4. The iron and Sulfur are now reacting together.





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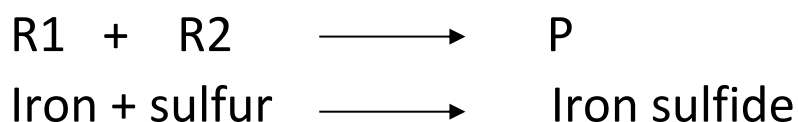
5. The orange glow is indicated that this is an exothermic reaction (energy released to the surroundings
6. The black solid product is iron sulfide.

Watch the experiment and fill up the table.

	color	visual appearance	Magnetic properties <u>yes/no</u>
sulfur			
iron			
mixture			
Mixture after heating			

Chemical synthesis is a reaction in which two or more simple reactants join together into a one difficult product.

(The production of chemical compounds by reaction from simpler materials)



Questions

What is an iron?

What is a sulfur?

What's mean synthesis?

What is product of this reaction?

Copy the blue table page 27.

