LABORATORY PROTOCOL		
Science practice in physics		
Name:		Class:
Coworker:		Group:
name of the task:	free fall and vertical upthrow	Date:

1. **TASK**: specify time of reaction of every student from your group.

Supplies:

Theoretical method:

The examined student sits on a chair and stretches out his hands in front of him or her, ready to clap. The hands are 10 cm apart, thumbs level. The experimenter holds the ruler with two fingers in a vertical position above the hands; number zero is located at the level of the beginning of the thumbs. In an unexpected moment, he lets go of the ruler, and it falls between his hands. As soon as the person registers the fall of the ruler, this person claps his or her hands and thereby catches the ruler. After clapping, the distance traveled by the ruler is read with an accuracy of 1 cm at the inch level (the level of the thumb's nail). The resault that we measured will be written in the table.

1. We'll make ten successful attempts and compute an algebraic weighted average for each student examined.

2. From this value, we'll count the speed and time of a free fall.

Formulas: $v = g \cdot t$ $s = \frac{1}{2} g \cdot t^2$

We calculate all the necessary values according to the specified formulas.

Working procedure: g= 9,81 m.s-2

s [m] Name	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	$\underline{x}$

2. **TASK**: Determine the maximum speed you can develop while vertical upthrow.

Supplies:

Theoretical method:

Make any little ball from clay. At the agreed-upon measurement location, each experimenter throws a little ball of clay, up and in front of them, as high as they can. The throw has to be as close as possible to a vertical throw. Attempts that look more like a slant throw are excluded, and only successful attempts are counted. During the experiment, the experimenters timed each other. The start of the measurement is at the exact time of the throw, and the end of the measurement is at the exact time of the ball's impact.

Measured numbers write in the table.

1. We make 7 succesfull attempts and choose longest and shortest measured numbers of each experimentator.

2. From these numbers calculate highest and lowest hight of orb and initial speed.

Formulas: $v_0 = g \cdot t$ $h_{max} = v_0^2/2g$

We calculate all needed numbers by given formulas. Don't forget that we have measured numbers of compound movement.

Working procedure: g= 9,81 m.s-2

t [s] Name	1.	2.	3.	4.	5.	6.	7.	lowest	highest

Calculation of the 1. Task:

Calculation of the 2. Task:

3. **TASK:** Electrolysis

Elektrolysis is a process, when the electrolyte solution is decomposited and passes through direct current

We attach the prepared anode and cathode to the given food. By connecting an electric clock to the diagram, we can find out if there is or isn't an electric current passing through the food.

Food	There is electric current	There isn't electric current	**Food**	There is electric current	There isn't electric current
Potato					
Lemon					
Banana					

Conclusion: Describe each step