

# Rules of Sigma Tournament 2014

The rules listed below are some adaptation of the rules of Phys-Math tournament which is a long tradition of Krasnoyarsk Summer School for gifted children.

- 1) Sigma Tournament is a team competition. Several teams compete by solving science and math problems on time.
- 2) Each team consists of 5 students (one of them is required to be 13 years or younger to encourage participation of younger children).
- 3) The tournament consists of 4-5 events known as "Days". They are listed below.

Day 1 (Physics and Math): teams meet in pairs and solve problems divided in "rounds"

Round 1 (20 min) 4 problems in Physics and Math.

Round 2 (10 min) Experimental physics or hands-on math problem for the whole team.

Day 2 (Biology and Chemistry): teams meet in pairs and solve problems divided in "tours"

Round 1 (20 min) 4 problems in Biology and Chemistry.

Round 2 (10 min) Experimental biology or chemistry problem for the whole team.

Day 3 (Math Game): teams meet in pairs and play the mathematical game (rules are given)

Round 1 (20 min) members of two teams play against each other several times.

Round 2 (10 min) After a discussion of tactics and strategy of the game the teams play against each other two more (collective) games.

Day 4 (Math-Linguistics): all teams solve the same problems.

Round 1 (20 min) 4-5 problems in Math and/or Linguistics.

Round 2 (10 min) Hands-on math or linguistics problem for the whole team.

Day 5 (Grand unification): all teams solve the same problems.

Time is recorded and the score depends only on how fast the problems are solved.

- 4) (Freelancers) To encourage the participation of students in the tournament they can help their own team by solving the problems during the competition. If a camper solves some problem faster than the competing teams he/she brings additional points to his/her team.

## **Scoring (regular day)**

### **Round 1:**

- Each problem fully solved is 2 points
- Partial solution can be 1 point
- Opponent finds mistake, inaccuracy or completes the solution 1 point
- Freelancers solve the problem correctly before the problem was claimed 2 points

### **Round 2:**

- Problem fully solved gives 4 points to the team