



THIS SHEET IS USED BY CHAIRPERSON ONLY

Captains are asked if they hear the Chairperson clearly.

Chairperson reads the first task aloud. Everyone in the Group hears the task.

The answers are provided by Captains in direct messages to the Chairperson.

The time to solve each problem is **20 seconds, including the time of typing.**

After collecting the answers, Chairperson moves on to the second task etc.

Points for any problem can be either **0** (invalid, absent, incomplete, unintelligible or wrong answer) or **1** (correct answer).

All answers and number of points are public.

The winner is determined by the maximum number of correct answers.

In case of a tie, an extra Problem 6 is offered, and the Captain with the best answer gets an extra 1 point.

The screenshots of answers are submitted to the Scoring Commission for archiving.

All scores (including an extra point in a tie breaker) and the winner are recorded in Science Fight Protocol.

8th IYNT 2020: Captain's Contest for Finals

1. Here is a list of five acids. Indicate the only acid which is **not** organic.

Acetic acid ($C_2H_4O_2$), Carbonic acid (H_2CO_3), Citric acid ($C_6H_8O_7$), Formic acid (CH_2O_2), Lactic acid ($C_3H_6O_3$)

2. Here is a list of four human organs. Indicate the only one which is **not** part of digestive tract.

Esophagus, Heart, Stomach, Rectum

3. In a so called Hertzsprung–Russell diagram, different stars fall into distinct sequences based on their brightness and color index. Name the sequence in which the Sun is located.

4. Order these four elements in the order of **increasing** atomic number.

Helium (He), Hydrogen (H), Oxygen (O), Nitrogen (N)

5. Order these four concentrated solutions in the order of **increasing** pH.

Acetic acid ($C_2H_4O_2$), Ammonia (NH_4OH), Sodium hydroxide ($NaOH$), Sulphuric acid (H_2SO_4)

Do not ask the question below unless a tie breaker is announced

6. Different Science Fight groups at the IYNT have different number of jurors. Estimate the maximum number of jurors that have ever been working in a single Science Fight group.

Correct answers:

1. Carbonic acid
2. Heart
3. Main sequence
4. Hydrogen→Helium→ Nitrogen→Oxygen
5. Sulphuric acid→Acetic acid→Ammonia→Sodium hydroxide
6. 16