

## Science Olympiad 2010 - It's About Time C

We will follow the rule book for the completion. The following is only for Clarification. If I digress from rules in the below comments, advise myself or Meredith and we will adjust.

For the competition the sound files will be those provided by the National Organization and amplified to be clearly audible across the testing room I will verify all students will be able to hear the signals before beginning.

We will use the national competition scoring sheet.

There will be a 20 question quiz taken directly from the free sources provided. The maximum written test score will be 50 points.

While I like and trust Wikipedia overall no questions will taken from it. The reason is simple. Due to the dynamic nature of information on Wikipedia, details on any point there MAY be incorrect or different when any student visits and uses it as a resource.

### **Tie Breakers:**

**Primary tie breaker:** There will be a section comprising of 3 questions taken from the material that will involve calculations that will be used for a tie-breaker. All other questions MUST be completed in the quiz section before the Tie Breaker questions will even be considered.

**Secondary tie breaker:** .All of the questions will have a point weight indicated and completion of the heavily weighted questions will show priority over the lower weighted questions if the same score is achieved between multiple teams.

For example, if a question has a weight of **2** and another has a weight of **3**, and the points are the same between teams, the weight of **3** will be the winner for tie breaking. If teams do not have the same score, the weighting of the question has NO BEARING.

Bill Ries-Knight  
209-518-1687  
[Steelhoof@gmail.com](mailto:Steelhoof@gmail.com)

On Twitter as [@steelhoof](https://twitter.com/steelhoof)

[http://soinc.org/its\\_about\\_time\\_c](http://soinc.org/its_about_time_c)

## IT'S ABOUT TIME

The information below should not be interpreted as an extension of the rules. The official rules in the Rules Manual take precedence.

Use these helpful links to prepare for It's About Time. This event is generously supported by the National Association of Watch and Clock Collectors:

- [Sample Score Sheet \(Excel\)](#) - Updated January 2010
- [Sample Score Sheet \(PDF\)](#) - Updated January 2010
- [Time Exhibits](#)
- [How Stuff Works: Electronics](#)
- [The Horology Source](#)
- [National Association of Watch and Clock Collectors](#)
- [National Association of Watch and Clock Collectors Chapter Finder \(Volunteer help\)](#)
- [National Institute of Standards and Technology "A Walk Through Time"](#)
- [The Science Channel's Exploring Time Series](#)
- Wikipedia Page on [Clocks](#)

Zip file containing computer generated MP3s with tones for all possible time trial periods. Note each file consists of the following:

1. An initial warning 'bell'
2. A short delay
3. Another warning 'bell'
4. A short delay
5. A start 'beep'
6. A precise delay equal to the time in the filename
7. A stop 'beep'

The time trial begins at the beginning of the start beep (step 5 above) and ends at the beginning of the stop beep (step 7).

Useful Resource: Jespersen, Fitz-Randolph, Robb.

"From Sundials to Atomic Clocks: Understanding Time and Frequency"  
1999.

# National Science Olympiad 2010 - It's About Time C

This is to be used with the excel spreadsheet found at [www.soinc.org](http://www.soinc.org)

Team Number: C\_\_ Team Name: \_\_\_\_\_ Rank: \_\_\_\_\_

Student Names: \_\_\_\_\_ Final Score: \_\_\_\_\_

**Do not write below this line.**

---

## Part I

### Target Time (Actual Time from Event Supervisor)

1. Trial 1 time in seconds to 0.1 sec (between 10 to 30 sec) \_\_\_\_\_
2. Trial 2 time in seconds to 0.1 sec (between 30 to 90 sec) \_\_\_\_\_
3. Trial 3 time in seconds to 0.1 sec (between 90 to 180 sec) \_\_\_\_\_
4. Trial 4 time in seconds to 0.1 sec (between 180 to 300 sec) \_\_\_\_\_
5. Trial 5 time in seconds to 0.1 sec (between 10 to 300 sec) \_\_\_\_\_

### Calculated Time (Time from Participants)

6. Trial 1 time in seconds to 0.1 sec \_\_\_\_\_
7. Trial 2 time in seconds to 0.1 sec \_\_\_\_\_
8. Trial 3 time in seconds to 0.1 sec \_\_\_\_\_
9. Trial 4 time in seconds to 0.1 sec \_\_\_\_\_
10. Trial 5 time in seconds to 0.1 sec \_\_\_\_\_

## Others

11. Penalty due to any material or substance splashes, spills or falls on table or floor (max. 10) \_\_\_\_\_
12. Team fails to completely clean up after their competition period. Y N
13. Device is operated in an unsafe manner or does not comply with the rules Y N
14. Disqualified (notify the team and their coach as soon as possible) Y N

## Part II

15. Score from written portion (maximum 50) \_\_\_\_\_