

# MUST-KNOW INFO ON THE TENNESSEE SCIENCE BOWL...

## When:

February 23, 2008, from 7:30 a.m. to 4:30 p.m.  
(In case of snow, March 1)

## Where:

Hardin Valley campus of Pellissippi State Technical Community College  
Knoxville, Tennessee

## Who to Contact for More Info:

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## Web Site:

[www.orau.gov/sciencebowl](http://www.orau.gov/sciencebowl)



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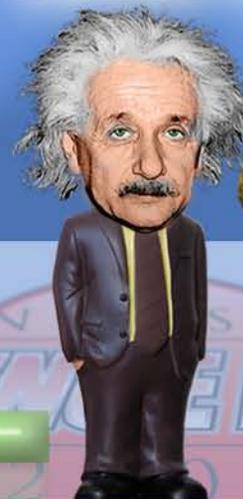
· FEBRUARY 23, 2008 ·  
KNOXVILLE, TENNESSEE



# ENERGIZE THE MIND!



Galileo



Einstein



Newton

FEBRUARY 23, 2008  
KNOXVILLE, TENNESSEE

See your science or math teacher for details.  
[www.orau.gov/sciencebowl](http://www.orau.gov/sciencebowl)  
Call 865-576-2312 for more information.

# BRING YOUR BEST AND BRIGHTEST SCIENTIFIC AND MATHEMATICAL MINDS TO THE TENNESSEE SCIENCE BOWL 2008!

The polar equation,  $r=3\sin(3t)$ , represents which of the following graphs? Is it the graph of a:

- |   |  |
|---|--|
| <input type="checkbox"/> cardioid           | <input type="checkbox"/> three-leaved rose |
| <input type="checkbox"/> Archimedian-spiral | <input type="checkbox"/> limacon           |

Which of the following is a necessary characteristic for electrons that share an s orbital:

- |   |   |
|---|---|
| <input type="checkbox"/> coplanar spins | <input type="checkbox"/> parallel spins |
| <input type="checkbox"/> opposite spins | <input type="checkbox"/> none of these  |

For an object moving in uniform circular motion, the direction of the instantaneous acceleration vector is:

- |  |   |
|--|---|
| <input type="checkbox"/> tangent to the path of motion | <input type="checkbox"/> equal to zero            |
| <input type="checkbox"/> directed radially outward     | <input type="checkbox"/> directed radially inward |

## Teachers!

Do you have students who would know the answers to the questions above without thinking twice? Do they thrive on competition?

Encourage, motivate, and recognize your strong performers in math and science! **Form a Science Bowl team!**

## What is the Tennessee Science Bowl?

It's a statewide academic competition—a chance for teams of high school students from across the state to represent their schools while matching their wits in math and science.

**Special prizes and awards**—Top four teams and civility award winner receive a trophy and a cash award. Teams traveling outside a 60-mile radius of their school may be eligible for travel reimbursement.

The winning team from Tennessee will travel to the Department of Energy's National Science Bowl® competition in Washington, D.C.—all expenses paid! At least the top 16 teams at the National Science Bowl each receive a cash award. The top five teams each receive a trophy and additional prizes. In addition, the winner of the civility award receives an award trip and a large trophy.

## Who is on a team?

Five outstanding students who know their science and math and aren't afraid to show it!

A full team is made up of four students plus an alternate—usually juniors or seniors (but not always!)—and a teacher or parent/volunteer who serves as mentor and coach.

The one-day statewide competition is played in a question-and-answer format where the two teams competing are asked a question, and the first to buzz in gets to answer it. The competition consists of two phases: the preliminary round-robin and the final double elimination contests. Teams first play in the round-robin competition to determine finalists for the double elimination.

## What is the format for the Science Bowl?

Teams are randomly placed in divisions and play against the teams within their division. The top two teams in each division advance to the double elimination ladder.

## Who is the competition?

You could be competing against teams from any school in the state of Tennessee. Schools *can* have more than one team (if space allows). *And no school is too small.*

*Everyone* is eligible and encouraged to compete.

In 2007, 49 teams had an action-packed day in February, with Farragut High School claiming the final victory. Oak Ridge High School's Team 2 came in second place, Maryville High School placed third, and Volunteer High School Church Hill was fourth. City University School of Liberal Arts Team 1 from Memphis won the civility award.

And just like in any competition, the same schools don't always win. That's why they play the game!

## What subjects do the questions cover?

- Astronomy
- Biology
- Chemistry
- Physics
- Earth science
- General science
- Mathematics

## How can a team practice?

The key to the competition is not only knowing the subjects but getting used to how the questions are asked. Sample questions from previous competitions are available on the Web at <http://www.orau.gov/sciencebowl>.

Second, students must master the art of buzzing in ahead of the competition. Buy the prank hand buzzers or anything that makes a noise (e.g., a horn) and use those to practice reacting before answering a question.

