



COMPETITION BOOK



May 1–6, 2008

Washington, D.C.

SUMMARY OF COMPETITION RULES

Competition Structure:

- The first tournament is in a round robin format with **8 divisions**. Each team will play every team in its division.
- The **top 2 teams** from each round robin division will move on to the **double elimination** tournament.
- In the event that the top 2 teams from each division are not clearly identifiable, the **team's ranking in the Division Team Challenge (DTC)** will be used to break the tie.

Rules Summary:

- Two types of questions will be used:
 - **Toss-up questions:** any member of either team that is currently playing may buzz in and answer a toss-up question. The toss-up must be answered correctly in order for a team to be offered a bonus question. No consultation is permitted among team members during a toss-up.
 - **Bonus questions:** after a toss-up question is answered correctly, the team is given the opportunity to answer a bonus question. Consultation among team members is permitted.
- A player is allowed to **interrupt** the reading of a toss-up question after the moderator has read the subject.
- Before answering a toss-up question, the student must be **verbally recognized**. If a student is not recognized prior to giving an answer, and they have buzzed in, it is considered a **Blurt**, and 4 points will be awarded to the opposing team.
- **Challenges** may only be made by a team member who is actively competing and must be made before the moderator begins the reading of the next question (including going from a toss-up to a bonus question). All decisions of the judges are final.
- Members of the audience will need to turn off all electronic devices while matches are being played, are not permitted to record any questions or answers, and may not take photographs during the match.

Timing:

- The match is played until either time expires or all of the toss-up questions have been read.
- In each round, there are **two 10 minute halves**, with a 2 minute break in between.
- After a toss-up question is read in its entirety, team members have **5 seconds** to buzz in.
- After a bonus question is read in its entirety, the captain of the team answering has **20 seconds** to begin answering the question.
- Teams will have **30 seconds** to begin answering **bonus visual questions**.
- So long as the moderator has read the subject of the question **when time runs out**, the entire process continues.

Scoring:

Type of Question	Points Awarded
Correct Toss-up	+4 points, & eligible for bonus
Incorrect Toss-up	+0 points
Correct Bonus	+10 points
Incorrect Bonus	+0 points
Interrupted Toss-up: <i>Correct Answer</i> <i>Incorrect Answer</i>	+4 points, & eligible for bonus +4 points to opposing team
After a team member buzzes in: <i>Unrecognized Toss-up (Blurt)</i> <i>Unrecognized Interrupted Toss-up (Blurt)</i>	+4 points to opposing team +4 points to opposing team
Before a team member buzzes in: <i>Answering a Toss-up</i> <i>Consultation Among Players</i>	+0 points but team will be disqualified from toss-up +0 points but team will be disqualified from toss-up



U.S. DEPARTMENT OF
ENERGY

2008 NATIONAL SCIENCE BOWL®

May 1–6, 2008

National 4-H Youth Conference Center
National Building Museum

<http://nationalsciencebowl.energy.gov>

U.S. Department of Energy

2008 NATIONAL SCIENCE BOWL®

TEAM	REGIONAL SITE	DIVISION & NUMBER
Aberdeen Central High School	WAPA - Huron	
Acalanes High School	Lawrence Berkeley National Laboratory	
Adlai E. Stevenson High School	William Fremd High School	
Albany High School	Sandia National Laboratories - California	
Albuquerque Academy	Sandia National Laboratories - New Mexico	
Amarillo High School - Gold	B&W Pantex	
A&M Consolidated High School	Texas A&M University	
Bellevue East High School	Natural Resources Conservation Service	
Biomedical STEP/Buffalo Prep	Monroe Community College	
Blue Valley West High School	Kansas City Plant	
Brooklyn Technical High School	Brookhaven National Laboratory	
Brophy College Preparatory	WAPA - Desert Southwest	
Burnt Hills-Ballston Lake High School	Knolls Atomic & General Electric Upstate New York	
Cape Elizabeth High School	University of Southern Maine	
Capital High School	National Energy Technology Laboratory - Morgantown	
Cedar Rapids Marion Home Schools	Ames Laboratory	
Chico High School	City of Redding Electric Utility	
Cole Valley Christian School	Batelle Energy Alliance - Idaho	
Dickinson High School	WAPA - Bismarck	
Edinburg North High School	University of Texas - Pan American	
Fairview High School	WAPA - Rocky Mountain Region	

TEAM	REGIONAL SITE	DIVISION & NUMBER
Glastonbury High School	University of Connecticut	
High Technology High School	Princeton Plasma Physics Laboratory	
Homestead High School	Stanford Linear Accelerator Center	
Huntsville High School	University of Arkansas - Fort Smith	
Idaho Falls High School	Idaho National Laboratory	
J.M. Hanks High School	SHPE New Mexico State University	
Lafayette High School	Strategic Petroleum Reserve	
Lakeside High School	Savannah River WSRC	
Lexington High School	Boston University	
Marshfield High School	Milwaukee School of Engineering	
Miami Palmetto Senior High School	SHPE - Florida International University	
Mira Loma High School	WAPA - Sierra Nevada Region	
Mississippi School for Mathematics and Science	Mississippi University for Women	
Mountain View High School	Bonneville Power Administration	
North Hollywood High School	Los Angeles Department of Water and Power	
Oak Park High School	Kansas City Plant	
Oak Ridge High School	Oak Ridge Institute for Science & Education	
Palm Harbor University High School	Science Center of Pinellas County	
Pueblo Centennial High School	National Renewable Energy Laboratory	
Pullman High School	Pacific Northwest Site Office	

U.S. Department of Energy

2008 NATIONAL SCIENCE BOWL®

TEAM	REGIONAL SITE	DIVISION & NUMBER
Punahou School	Hawaii Science Bowl	
Renaissance High School	NOBCChE Midwest Region	
Saint John's School	Society of Hispanic Professional Engineers - University of Puerto Rico - Mayaguez	
Saint Mary's Hall School	Texas San Antonio	
Santa Monica High School	Jet Propulsion Laboratory	
School of Imaging & Information Technology at Edison	NOBCChE Northeast Region	
Skyview High School	WAPA - Billings	
Soda Springs High School	U.S. Department of Energy - Idaho Operations Office	
Star Valley High School	Rocky Mountain Oilfield Testing Center	
State College Area High School	National Energy Technology Laboratory - Pittsburgh	
St. Croix Educational Complex	Virgin Islands Department of Education	
Stockdale High School	California State University	
St. Paul Central High School	Minnesota Academy of Science	
Sycamore High School	DOE Environmental Management Consolidated Business Center	
Terre Haute South Vigo High School	Indiana State University	
Texas Academy of Mathematics and Science	Texas Society of Hispanic Professional Engineers	
The Meadows School	National Nuclear Security Administration - Nevada Operations Office	

TEAM	REGIONAL SITE	DIVISION & NUMBER
Theodore Roosevelt High School	SHPE Region 6 - Chicago Science Bowl	
The Preuss School UCSD	NOBCChE San Diego	
The Randolph School	Alabama School of Math & Science	
Thomas Downey High School	Modesto Irrigation District	
Thomas Jefferson High School for Science & Technology	Thomas Jefferson National Accelerator Facility	
Walton High School	Armstrong Atlantic State University	
Walt Whitman High School	Montgomery College	
William G. Enloe High School	North Carolina Central University	
Woodrow Wilson Senior High School	Howard University	

**U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
TEAM NAMES BY DIVISION**

ARRHENIUS DIVISION		BROMERY DIVISION	
TEAM #	SCHOOL	TEAM #	SCHOOL
A - 1		B - 1	
A - 2		B - 2	
A - 3		B - 3	
A - 4		B - 4	
A - 5		B - 5	
A - 6		B - 6	
A - 7		B - 7	
A - 8		B - 8	
A - 9		B - 9	

CURIE DIVISION		DARWIN DIVISION	
TEAM #	SCHOOL	TEAM #	SCHOOL
C - 1		D - 1	
C - 2		D - 2	
C - 3		D - 3	
C - 4		D - 4	
C - 5		D - 5	
C - 6		D - 6	
C - 7		D - 7	
C - 8		D - 8	
C - 9			

**U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
TEAM NAMES BY DIVISION**

EINSTEIN DIVISION		FERMI DIVISION	
TEAM #	SCHOOL	TEAM #	SCHOOL
E - 1		F - 1	
E - 2		F - 2	
E - 3		F - 3	
E - 4		F - 4	
E - 5		F - 5	
E - 6		F - 6	
E - 7		F - 7	
E - 8		F - 8	

GALILEO DIVISION		HYPATIA DIVISION	
TEAM #	SCHOOL	TEAM #	SCHOOL
G - 1		H - 1	
G - 2		H - 2	
G - 3		H - 3	
G - 4		H - 4	
G - 5		H - 5	
G - 6		H - 6	
G - 7		H - 7	
G - 8		H - 8	

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
ARRHENIUS DIVISION
Nine (9) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	BYE TEAM
1 11:15 A.M.	1 VS 2	OHIO	3 VS 4	MINNESOTA	5 VS 6	JOHN DEERE	7 VS 8	MISSOURI	9
2 12:00 NOON	1 VS 3	OHIO	2 VS 4	MINNESOTA	6 VS 9	JOHN DEERE	5 VS 7	MISSOURI	8
3 12:30 P.M.		NO		GAMES		THIS		ROUND	
4 1:00 P.M.	1 VS 4	CLOVER "A"	2 VS 3	CLOVER "C"	5 VS 9	AMERICA "A"	6 VS 8	AMERICA "B"	7
5 1:30 P.M.	4 VS 8	CLOVER "A"	3 VS 7	CLOVER "C"	2 VS 9	AMERICA "A"	1 VS 5	AMERICA "B"	6
6 2:00 P.M.	3 VS 8	CLOVER "A"	2 VS 7	CLOVER "C"	4 VS 9	AMERICA "A"	1 VS 6	AMERICA "B"	5
2:30 P.M.	B R E A K					RECREATION CTR & KANSAS COURTYARD			
7 3:00 P.M.	1 VS 7	CALIFORNIA	3 VS 6	MONTANA	8 VS 9	IDAHO	2 VS 5	ILLINOIS	4
8 3:30 P.M.	1 VS 9	CALIFORNIA	6 VS 7	MONTANA	2 VS 8	IDAHO	4 VS 5	ILLINOIS	3
9 4:00 P.M.	7 VS 9	CALIFORNIA	4 VS 6	MONTANA	3 VS 5	IDAHO	1 VS 8	ILLINOIS	2
10 4:30 P.M.	4 VS 7	CALIFORNIA	2 VS 6	MONTANA	5 VS 8	IDAHO	3 VS 9	ILLINOIS	1

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

Svante ARRHENIUS (1859 – 1927); Physical Chemist, Professor

Svante Arrhenius, who won a Nobel Prize in Chemistry, was a Swedish physical chemist most noted for his theory that electrolytes are dissociated into electrically charged particles, or ions, even when there is no current flowing through the solution as well as his work on the greenhouse effect.

TEAM	1	2	3	4	5	6	7	8	9	TOTAL POINTS	DTC RANK
1	1									1	
2		1								1	
3			1							1	
4				1						1	
5					1					1	
6						1				1	
7							1			1	
8								1		1	
9									1	1	

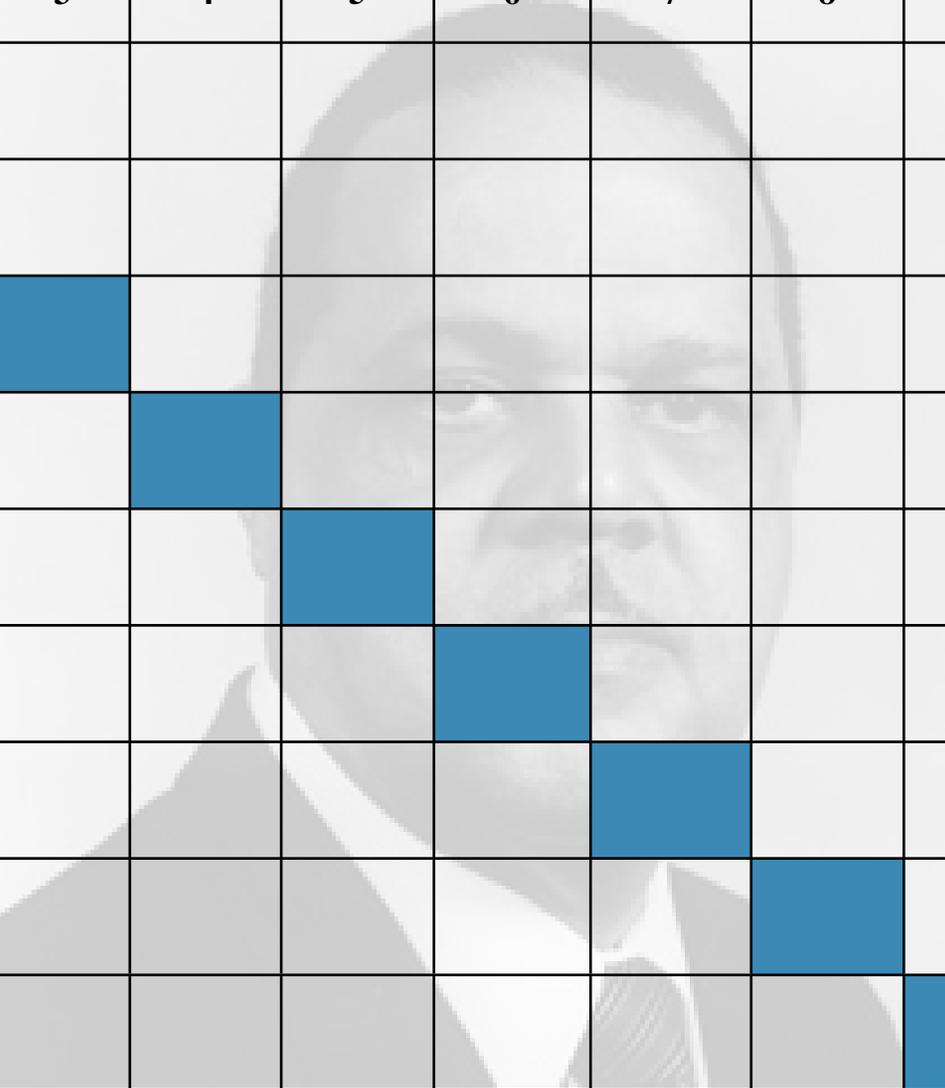
U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
BROMERY DIVISION
Nine (9) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	BYE TEAM
1 11:15 A.M.	1 VS 2	CLOVER "A"	3 VS 4	CLOVER "C"	5 VS 6	AMERICA "A"	7 VS 8	AMERICA "B"	9
2 12:00 NOON	1 VS 3	CLOVER "A"	2 VS 4	CLOVER "C"	6 VS 9	AMERICA "A"	5 VS 7	AMERICA "B"	8
3 12:30 P.M.	1 VS 4	CLOVER "A"	2 VS 3	CLOVER "C"	5 VS 9	AMERICA "A"	6 VS 8	AMERICA "B"	7
4 1:00 P.M.		NO		GAMES		THIS		ROUND	
5 1:30 P.M.	4 VS 8	WISCONSIN	3 VS 7	WEST VIRGINIA	2 VS 9	WASHINGTON	1 VS 5	LOUISIANA	6
6 2:00 P.M.	3 VS 8	WISCONSIN	2 VS 7	WEST VIRGINIA	4 VS 9	WASHINGTON	1 VS 6	LOUISIANA	5
2:30 P.M.	B R E A K					RECREATION CTR & KANSAS COURTYARD			
7 3:00 P.M.	1 VS 7	WISCONSIN	3 VS 6	WEST VIRGINIA	8 VS 9	WASHINGTON	2 VS 5	LOUISIANA	4
8 3:30 P.M.	1 VS 9	WISCONSIN	6 VS 7	WEST VIRGINIA	2 VS 8	WASHINGTON	4 VS 5	LOUISIANA	3
9 4:00 P.M.	7 VS 9	WISCONSIN	4 VS 6	WEST VIRGINIA	3 VS 5	WASHINGTON	1 VS 8	LOUISIANA	2
10 4:30 P.M.	4 VS 7	WISCONSIN	2 VS 6	WEST VIRGINIA	5 VS 8	WASHINGTON	3 VS 9	LOUISIANA	1

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

Randolph BROMERY (1926 –); Geophysicist, Geologist, Educator

Randolph Bromery, a Tuskegee Airman and pioneer in the integration of African Americans into the field of Earth science, contributed in the ground-breaking efforts of airborne geomagnetic surveying that involved the development and testing of new equipment and the interpretation of data.



TEAM	1	2	3	4	5	6	7	8	9	TOTAL POINTS	DTC RANK
1	■									■	■
2		■								■	■
3			■							■	■
4				■						■	■
5					■					■	■
6						■				■	■
7							■			■	■
8								■		■	■
9									■	■	■

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
CURIE DIVISION
Nine (9) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	BYE TEAM
1 11:15 A.M.	1 VS 2	INDIANA	3 VS 4	MICHIGAN	5 VS 6	KENTUCKY	7 VS 8	COLORADO	9
2 12:00 NOON		NO		GAMES		THIS		ROUND	
3 12:30 P.M.	1 VS 3	OHIO	2 VS 4	MINNESOTA	6 VS 9	JOHN DEERE	5 VS 7	MISSOURI	8
4 1:00 P.M.	1 VS 4	OHIO	2 VS 3	MINNESOTA	5 VS 9	JOHN DEERE	6 VS 8	MISSOURI	7
5 1:30 P.M.	4 VS 8	OHIO	3 VS 7	MINNESOTA	2 VS 9	JOHN DEERE	1 VS 5	MISSOURI	6
6 2:00 P.M.	3 VS 8	OHIO	2 VS 7	MINNESOTA	4 VS 9	JOHN DEERE	1 VS 6	MISSOURI	5
2:30 P.M.	B	R	E	A	K	RECREATION CTR & KANSAS COURTYARD			
7 3:00 P.M.	1 VS 7	INDIANA	3 VS 6	MICHIGAN	8 VS 9	KENTUCKY	2 VS 5	COLORADO	4
8 3:30 P.M.	1 VS 9	INDIANA	6 VS 7	MICHIGAN	2 VS 8	KENTUCKY	4 VS 5	COLORADO	3
9 4:00 P.M.	7 VS 9	INDIANA	4 VS 6	MICHIGAN	3 VS 5	KENTUCKY	1 VS 8	COLORADO	2
10 4:30 P.M.	4 VS 7	INDIANA	2 VS 6	MICHIGAN	5 VS 8	KENTUCKY	3 VS 9	COLORADO	1

5:15 P.M.	ANNOUNCEMENTS						RECREATION CENTER		
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS						CLOVER CAFÉ		

Marie CURIE (1867 – 1934); Physicist, Chemist, Professor

Marie Curie's work in radioactivity and isolating radium was a key to a basic change in our understanding of matter and energy and highly impacted new advances in medical research and treatments. She won Nobel Prizes in both Physics and Chemistry.

TEAM	1	2	3	4	5	6	7	8	9	TOTAL POINTS	DTC RANK
1	1										
2		1									
3			1								
4				1							
5					1						
6						1					
7							1				
8								1			
9									1		

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
DARWIN DIVISION
Eight (8) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 11:15 A.M.	1 VS 2	WISCONSIN	3 VS 4	WEST VIRGINIA	TEAMS 5 & 6	OFF THIS ROUND	TEAMS 7 & 8	OFF THIS ROUND
2 12:00 NOON	TEAMS 1 & 2	OFF THIS ROUND	TEAMS 3 & 4	OFF THIS ROUND	5 VS 6	WASHINGTON	7 VS 8	LOUISIANA
3 12:30 P.M.	1 VS 3	WISCONSIN	2 VS 4	WEST VIRGINIA	5 VS 7	WASHINGTON	6 VS 8	LOUISIANA
4 1:00 P.M.	1 VS 4	WISCONSIN	2 VS 3	WEST VIRGINIA	6 VS 7	WASHINGTON	5 VS 8	LOUISIANA
5 1:30 P.M.		NO		GAMES		THIS		ROUND
6 2:00 P.M.	1 VS 5	INDIANA	2 VS 6	MICHIGAN	3 VS 7	KENTUCKY	4 VS 8	COLORADO
2:30 P.M.	B	R	E	A	K	RECREATION CTR & KANSAS COURTYARD		
7 3:00 P.M.	1 VS 6	OHIO	2 VS 5	MINNESOTA	4 VS 7	JOHN DEERE	3 VS 8	MISSOURI
8 3:30 P.M.	1 VS 7	OHIO	3 VS 5	MINNESOTA	4 VS 6	JOHN DEERE	2 VS 8	MISSOURI
9 4:00 P.M.	TEAMS 3 & 6	OFF THIS ROUND	TEAMS 4 & 5	OFF THIS ROUND	2 VS 7	JOHN DEERE	1 VS 8	MISSOURI
10 4:30 P.M.	3 VS 6	OHIO	4 VS 5	MINNESOTA	TEAMS 2 & 7	OFF THIS ROUND	TEAMS 1 & 8	OFF THIS ROUND

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
EINSTEIN DIVISION
Eight (8) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 11:15 A.M.	5 VS 6	IOWA "A"	7 VS 8	IOWA "B"	TEAMS 1 & 2	OFF THIS ROUND	TEAMS 3 & 4	OFF THIS ROUND
2 12:00 NOON	1 VS 2	IOWA "A"	3 VS 4	IOWA "B"	TEAMS 5 & 6	OFF THIS ROUND	TEAMS 7 & 8	OFF THIS ROUND
3 12:30 P.M.	1 VS 3	IOWA "A"	2 VS 4	IOWA "B"	5 VS 7	ARKANSAS	6 VS 8	OKLAHOMA "A"
4 1:00 P.M.	1 VS 4	IOWA "A"	2 VS 3	IOWA "B"	6 VS 7	ARKANSAS	5 VS 8	OKLAHOMA "A"
5 1:30 P.M.	1 VS 5	IOWA "A"	2 VS 6	IOWA "B"	TEAMS 3 & 7	OFF THIS ROUND	TEAMS 4 & 8	OFF THIS ROUND
6 2:00 P.M.	1 VS 6	IOWA "A"	2 VS 5	IOWA "B"	4 VS 7	IDAHO	3 VS 8	ILLINOIS
2:30 P.M.	B	R	E	A	K	RECREATION CTR & KANSAS COURTYARD		
7 3:00 P.M.	1 VS 7	IOWA "A"	2 VS 8	IOWA "B"	TEAMS 4 & 6	OFF THIS ROUND	TEAMS 3 & 5	OFF THIS ROUND
8 3:30 P.M.	4 VS 6	IOWA "A"	3 VS 5	IOWA "B"	TEAMS 1 & 7	OFF THIS ROUND	TEAMS 2 & 8	OFF THIS ROUND
9 4:00 P.M.	3 VS 6	IOWA "A"	4 VS 5	IOWA "B"	2 VS 7	OHIO	1 VS 8	MINNESOTA
10 4:30 P.M.	3 VS 7	IOWA "A"	4 VS 8	IOWA "B"	TEAMS 1 & 5	OFF THIS ROUND	TEAMS 2 & 6	OFF THIS ROUND

5:15 P.M.	ANNOUNCEMENTS						RECREATION CENTER	
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS						CLOVER CAFÉ	

Albert EINSTEIN (1879 – 1955); Theoretical Physicist, Professor

Albert Einstein, one of the greatest scientific minds of all time, was a German-born theoretical physicist best known for his theory of relativity and specifically mass-energy equivalence, $E = mc^2$. He received a Nobel Prize in Physics.

TEAM	1	2	3	4	5	6	7	8	TOTAL POINTS	DTC RANK
1	1								1	1
2		1							1	1
3			1						1	1
4				1					1	1
5					1				1	1
6						1			1	1
7							1		1	1
8								1	1	1

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
FERMI DIVISION
Eight (8) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 11:15 A.M.		NO		GAMES		THIS		ROUND
2 12:00 NOON	1 VS 2	INDIANA	3 VS 4	MICHIGAN	5 VS 6	KENTUCKY	7 VS 8	COLORADO
3 12:30 P.M.	1 VS 3	INDIANA	2 VS 4	MICHIGAN	6 VS 8	KENTUCKY	5 VS 7	COLORADO
4 1:00 P.M.	1 VS 4	INDIANA	2 VS 3	MICHIGAN	5 VS 8	KENTUCKY	6 VS 7	COLORADO
5 1:30 P.M.	1 VS 5	INDIANA	2 VS 6	MICHIGAN	3 VS 7	KENTUCKY	4 VS 8	COLORADO
6 2:00 P.M.		NO		GAMES		THIS		ROUND
2:30 P.M.	B	R	E	A	K	RECREATION CTR & KANSAS COURTYARD		
7 3:00 P.M.	1 VS 6	CLOVER "A"	2 VS 5	CLOVER "C"	4 VS 7	AMERICA "A"	3 VS 8	AMERICA "B"
8 3:30 P.M.	1 VS 7	CLOVER "A"	2 VS 8	CLOVER "C"	4 VS 6	AMERICA "A"	3 VS 5	AMERICA "B"
9 4:00 P.M.	2 VS 7	CLOVER "A"	1 VS 8	CLOVER "C"	3 VS 6	AMERICA "A"	4 VS 5	AMERICA "B"
10 4:30 P.M.		NO		GAMES		THIS		ROUND

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
GALILEO DIVISION
Eight (8) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 11:15 A.M.	1 VS 2	SATURDAY TIME TBD	3 VS 4	ARKANSAS	5 VS 6	OKLAHOMA "A"	7 VS 8	OKLAHOMA "C"
2 12:00 NOON	1 VS 3	SATURDAY TIME TBD	2 VS 4	ARKANSAS	5 VS 7	OKLAHOMA "A"	6 VS 8	OKLAHOMA "C"
3 12:30 P.M.	1 VS 4	SATURDAY TIME TBD	TEAMS 6 & 7	OFF THIS ROUND	TEAMS 5 & 8	OFF THIS ROUND	2 VS 3	OKLAHOMA "C"
4 1:00 P.M.	1 VS 5	SATURDAY TIME TBD	3 VS 7	CALIFORNIA	4 VS 8	MONTANA	2 VS 6	OKLAHOMA "C"
5 1:30 P.M.	1 VS 6	SATURDAY TIME TBD	4 VS 7	CALIFORNIA	3 VS 8	MONTANA	2 VS 5	OKLAHOMA "C"
6 2:00 P.M.	1 VS 7	SATURDAY TIME TBD	4 VS 6	CALIFORNIA	2 VS 8	MONTANA	3 VS 5	OKLAHOMA "C"
2:30 P.M.	B	R	E	A	K	RECREATION CTR & KANSAS COURTYARD		
7 3:00 P.M.	TEAMS 1 & 4	OFF THIS ROUND	6 VS 7	ARKANSAS	5 VS 8	OKLAHOMA "A"	TEAMS 2 & 3	OFF THIS ROUND
8 3:30 P.M.		NO		GAMES		THIS		ROUND
9 4:00 P.M.	TEAMS 1 & 8	OFF THIS ROUND	TEAMS 3 & 6	OFF THIS ROUND	TEAMS 4 & 5	OFF THIS ROUND	2 VS 7	OKLAHOMA "C"
10 4:30 P.M.	1 VS 8	SATURDAY TIME TBD	3 VS 6	ARKANSAS	4 VS 5	OKLAHOMA "A"	TEAMS 2 & 7	OFF THIS ROUND

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

Galileo GALILEI (1564 – 1642); Physicist, Mathematician, Astronomer, Philosopher

Galileo Galilei, the “father of modern observational astronomy,” was an Italian physicist whose achievements include the first systematic studies of uniformly accelerated motion as well as improvements to the telescope and consequent astronomical observations.

TEAM	1	2	3	4	5	6	7	8	TOTAL POINTS	DTC RANK
1	1									
2		1								
3			1							
4				1						
5					1					
6						1				
7							1			
8								1		

U.S. Department of Energy
2008 NATIONAL SCIENCE BOWL®
HYPATIA DIVISION
Eight (8) Teams

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 11:15 A.M.	1 VS 5	CALIFORNIA	2 VS 6	MONTANA	3 VS 7	IDAHO	4 VS 8	ILLINOIS
2 12:00 NOON	1 VS 6	CALIFORNIA	2 VS 5	MONTANA	4 VS 7	IDAHO	3 VS 8	ILLINOIS
3 12:30 P.M.	6 VS 7	CALIFORNIA	5 VS 8	MONTANA	1 VS 4	IDAHO	2 VS 3	ILLINOIS
4 1:00 P.M.	TEAMS 5 & 6	OFF THIS ROUND	TEAMS 7 & 8	OFF THIS ROUND	1 VS 2	IDAHO	3 VS 4	ILLINOIS
5 1:30 P.M.	5 VS 6	ARKANSAS	7 VS 8	OKLAHOMA "A"	1 VS 3	IDAHO	2 VS 4	ILLINOIS
6 2:00 P.M.	5 VS 7	ARKANSAS	6 VS 8	OKLAHOMA "A"	TEAMS 1 & 3	OFF THIS ROUND	TEAMS 2 & 4	OFF THIS ROUND
2:30 P.M.	B R E A K					RECREATION CTR & KANSAS COURTYARD		
7 3:00 P.M.	1 VS 7	OKLAHOMA "C"	TEAMS 3 & 5	OFF THIS ROUND	TEAMS 4 & 6	OFF THIS ROUND	TEAMS 2 & 8	OFF THIS ROUND
8 3:30 P.M.	TEAMS 1 & 7	OFF THIS ROUND	3 VS 5	ARKANSAS	4 VS 6	OKLAHOMA "A"	2 VS 8	OKLAHOMA "C"
9 4:00 P.M.		NO		GAMES		THIS		ROUND
10 4:30 P.M.	2 VS 7	CLOVER "A"	3 VS 6	CLOVER "C"	4 VS 5	AMERICA "A"	1 VS 8	AMERICA "B"

5:15 P.M.	ANNOUNCEMENTS	RECREATION CENTER
5:00 P.M. TO 6:45 P.M.	DINNER & TEAM CAPTAINS RECEIVE DOUBLE ELIMINATION NAME TENTS	CLOVER CAFÉ

HYPATIA (about 370 – 415 AD); Mathematician, Astronomer, Philosopher

Hypatia, an Egyptian scholar, was the first woman to make a substantial contribution to the development of mathematics by making geometry intelligible to her students. She also taught philosophy and astronomy.



TEAM	1	2	3	4	5	6	7	8	TOTAL POINTS	DTC RANK
1	■								■	■
2		■							■	■
3			■						■	■
4				■					■	■
5					■				■	■
6						■			■	■
7							■		■	■
8								■	■	■

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SIXTEEN (16) TEAM DOUBLE ELIMINATION

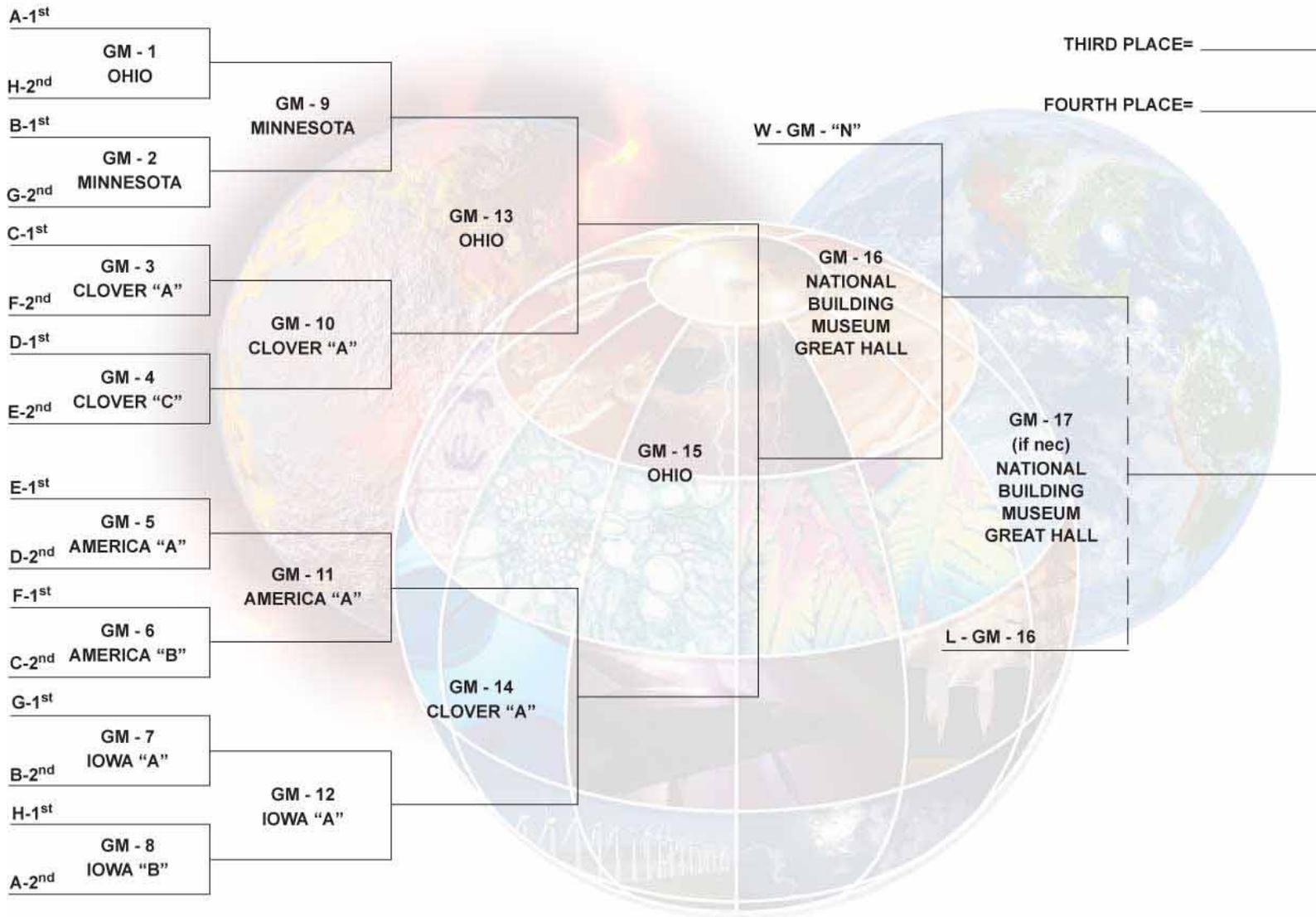
OVERALL CHAMPION= _____

NO-LOSS BRACKET

SECOND PLACE= _____

THIRD PLACE= _____

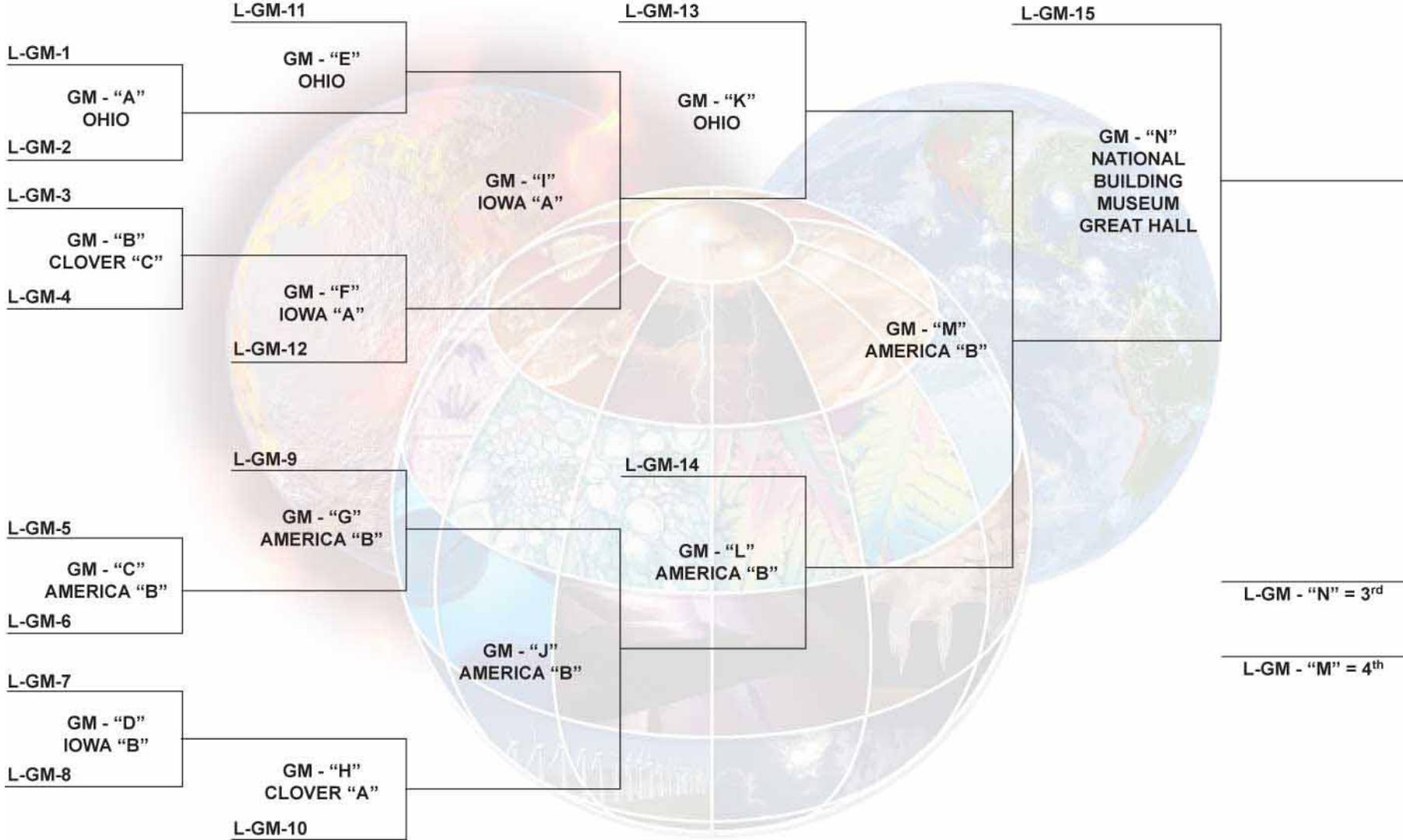
FOURTH PLACE= _____



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SIXTEEN (16) TEAM DOUBLE ELIMINATION

CHALLENGERS BRACKET



ROUND 2
SUN - 7:30 P.M.

ROUND 3
SUN - 8:00 P.M.

ROUND 4
SUN - 8:30 P.M.

ROUND 5
MON - 8:00 A.M.

ROUND 6
MON - 8:30 A.M.

ROUND 7
MON - 10:30 A.M.



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