

Indiana Science Bowl



Coaches Handbook

2022

A program of the
Indiana Association of School Principals



in partnership with



Changes/Additions/Updates for 2022 Science Bowl

- The standard to be used for the 2021-2022 school year will be Earth Science.
- Competition class will be determined by the school enrollment as submitted on the Department of Student Programs Membership-Participation form.
- Coaches will no longer be asked to sign and email/fax the Honor Code at the back of this Coach Handbook. We do ask that you review the contest guidelines listed there.

RULES

1 Content:

- a) The elementary competition will be made up of three rounds. The Experiment Round and the Team Round will not have a limit of eligible students. The Individual Round will include four students. All questions will be administered through an online test.
- b) The IASP Board of Directors believes that academic competition is an extracurricular activity. Therefore, organized team practices for academic competitions shall not take place during any instructional part of the school day. In addition, special courses should not be designed or implemented for the primary purpose of preparing teams for academic competition.

All building principals are encouraged to review this position statement with academic coordinators and coaches to clarify that all organized team practices occur as an extracurricular activity. However, non-instructional time, such as lunch and recess, could be used for organized team practices. It is permissible for students to read and do online research during the school day, as long as there is not any organized practice, and research does not occur during school instructional time.

Competition Tests may be taken at any time during the testing window, including instructional time, if determined appropriate by the school principal and team coach.

2 Study Guidelines:

- a) The competition will be based on 2010 Indiana Department of Education Standards for Science, grades 5, 6, and 7. Four Content Curriculum Standards will be used on an annually rotating basis:
 1. Physical Science
 2. Earth Science
 3. Life Science
 4. Science, Technology, and Engineering

The standard to be used for the 2021-2022 school year will be Earth Science.

The Content Standard to be utilized for the 2022-2023 school year will be Life Science.

The Content Standard to be utilized for the 2023-2024 school year will be Science, Technology & Engineering.

The standard to be used for the 2024-2025 school year will be Physical Science.

- b) An academic coach webinar will be available for participating coaches in the fall of each year and will explain the various forms, rules/regulations, Indiana Standards, and addenda.

3 Expenses:

- a) An entry fee will be charged to participate in the Science Bowl. The entry fee must be received by the close of the school year. This fee will help to defray the costs of writing the questions, purchasing awards, and other expenses associated with the competition. Each school will be responsible for its own expenses.
- b) All schools choosing to participate in the Science Bowl competition must be Department of Student Programs member schools. Please check with your administrator to ensure your school's membership is current.

4 Enrollment Classifications:

- a) For each Division, a classification of schools by enrollment size and grade level of participating students will be utilized. Schools may elect to compete in enrollment classification if they so desire.

The size classifications are based on the pool of total available students per grade in grades 4 grades 4 and 5, grades 5 and 6, and grades 4, 5, and 6.

Teams with 6th grade members
Blue Class - 187 and up
Green Class- up to 186

Teams without 6th grade members
Orange Class - 163 and up
Red Class - up to 162

4th Grade ONLY teams
Yellow Class

- SAMPLE:
1. A team with Grade 4 members only will be in Yellow Class.
 2. A team with Grades 4 and 5 members, with a total enrollment in both grades of 178, will be in Orange Class.
 3. A team with Grades 5 and 6 members, with a total enrollment in both grades of 109, will be in Green Class
 4. A team with Grades 4, 5, and 6 members, with a total enrollment in all 3 grades of 253, will be in Blue Class.

- b) This enrollment number will be determined by the school enrollment as submitted on the Department of Student Programs Membership-Participation form.

5 Eligibility:

- a) Any student enrolled full-time in grades 4, 5 and 6 is eligible to compete on that school's elementary team. Schools may select their teams in any manner, and with any additional criteria, they choose.

6 Supervision:

- a) Each team is to be supervised by a coach designated by the school principal. This coach will be responsible for seeing that all team members follow all rules and behave in an appropriate manner.

7 Format:

- a) The competition will consist of three rounds.
- b) Online tests for each round may be completed in any order. Each round will have a 30 minute time limit. Questions for each round shall consist of multiple-choice and/or true/false questions.
- c) Team Rounds will consist of 10 questions, completed cooperatively by an unlimited group of students. Experiment Rounds will consist of 10 questions, completed cooperatively by an unlimited group of students. Individual Rounds will consist of 15 questions, answered individually by 4 students. **Note regarding Experiment Round: We encourage teams to do the experiment before the competition and to take notes as the experiment is performed, as notes may be used during the Experiment Round test.**

8 Time Limits:

- a) Each of the three rounds will be allotted 30 minutes for completion.
- b) Breaks may be taken between rounds, at the discretion of the coach.

9 Consultation:

- a) Consultation between team members is encouraged during the Team and Experiment Rounds.
- b) No consultation of any sort is permitted during the Individual Round.

10 Calculators:

- a) Calculators are permitted during the competition. Question writer(s) will indicate prior to the competition if calculators may be useful.

11 Challenges:

- a) All questions and answers are considered to be official as presented and will stand. A written challenge to questions or answers should be sent to the IASP office for an investigation and a response at a later date. This written challenge should contain documentation stating why the answer or question may be incorrect. No adjustment in scores will be made, but the question writers and proof readers will be notified of the problem.

12 Scoring:

- a) Team Round Questions will each be worth 4 points (10 questions for a maximum total of 40 points). Experiment Round questions will each be worth 3 points (10 questions for a maximum of 30 points). Individual Round scores of all 4 students will be averaged. The average number of Individual Round questions will then be worth 2 points each (15 questions, for a maximum of 30 points).

b) The Final Score will be a sum of the three round scores.

13 Breaking Ties:

- a) In the event there is a tie score at the end of the competition, the first tie-breaker (TB-1) will be the correct number of tie breaker questions in the Team Round (Maximum score will be 2).
- b) If a tie remains after utilizing the first tie-breaker method, the second tie-breaking procedure (TB-2) will be the number of correct questions in the Experiment Round. (Maximum score will be 2).
- c) If a tie still exists after using the first two tie-breaker methods, the third tie-breaker (TB-3) will be the number of correct tie breaker questions in the Individual Round. (Maximum score will be 8).
- d) If the tie for all rounds is not broken after using the three tie-breaker methods, the score will stand.
- f) Because of the importance of the last questions of each round in the tie-breaker process, every effort will be made to ensure these are the most challenging. A perfect score would be 100-2-2-8.
- g) All scores will be calculated by the IASP staff.

14 Technical Requirements:

Science Bowl will be administered through SurveyMonkey (system used for several years). Up to four computers will be used.

16 Awards:

- 1. Certificate templates will be available on the Science Bowl web page for coaches to personalize with team member names.
- 2. First, Second and Third Place Ribbons will be awarded to teams placing in the top 3 in their enrollment class; Participant ribbons are available to all other participating teams. *For ribbons, email Diane Abel, dabel@iasp.org, for number needed.*
- 3. Team plaques will be awarded to those placing in the top 3 in their enrollment class.

Honor Code

The Indiana Association of School Principals (IASP) sponsors various programs that benefit all students in Indiana. The IASP Department of Student Programs organizes academic competitions for elementary, junior high/middle, and high school students. By the nature of academic competitions, the atmosphere at each competition should be challenging and intense, but sportsmanship, common sense, decency, fairness, and respect should prevail at all times. These virtues should be taught to students by adults, then adhered to by students and coaches at all competition sites.

The majority of coaches and students conduct themselves in an exemplary manner and are commended for displaying positive attitudes and behavior.

The IASP Board of Directors reminds principals of their responsibility to make certain that all personnel and students conduct themselves in the proper manner at all school functions. Therefore, the board expects that all principals require coaches and students to display appropriate behavior and sportsmanship at all academic competitions.

Study aids, books and other materials are not permitted in the competition room.

Using the computer to look up answers is not permitted during the competition.

Consultation between students is not permitted during the Individual Round.

Coaches are not permitted to discuss the content of the competition, but may assist with technical issues involving using the testing site. Coaches may follow procedures similar to ISTEP testing rules when helping administer competition tests.

It IS acceptable to have a technology expert in the testing room. Any other observers may be allowed at the discretion of each coach, but must follow the same honor code procedures as students and coaches.

The content of the competition questions should not be discussed with anyone outside your own team until after the competition testing window had ended.

Printing, saving, or taking notes on the content of the competition questions is not permitted during the contest.

Calculator memories should be cleared prior to the beginning of the competition.