

## Competition Structure:

1. The BioBrawl Biology Bowl Competition is a premier biology competition for both middle and high schoolers.
2. Each participating team must have at least 3 members and no more than 5 members.
3. The competition consists of 2 rounds: the Written Round and the Elimination Round.
4. All teams must first complete the Written Round. Team seeding will be determined by performance in this round.
5. The Written Round will take place an hour before the Elimination Round on Zoom.
6. The Elimination Round will take place on Zoom. It will be in a double elimination format.

## Written Round Rules:

1. There will be 21 questions that will be completed in 30 minutes by the entire team.
2. The test must be completed with an official present in the Zoom meeting.
3. Only the answers submitted through the google form will be accepted.
4. Each student must have another device with a camera on the Zoom call via the Zoom app to show the student's workspace and surrounding area during the competition and to help the officials ensure the students and coaches are not breaking any rules.

## Elimination Round Rules:

1. Each student must have another device with a camera on the Zoom call via the Zoom app to show the student's workspace and surrounding area during the competition and to help the officials ensure the students and coaches are not breaking any rules.
2. Two types of questions will be used: toss-up questions, worth 4 points, and bonus questions, worth 10 points. A toss-up question may be answered by any of the 4 members of either team that are actively competing. A team answering a toss-up question correctly will always have an opportunity to answer a bonus question; the other team is ineligible. Non-verbal communication among team members is allowed on toss-up questions, and both verbal and non-verbal communication is allowed on bonus questions. The question categories are Animals, Plants, Human Anatomy and Physiology, Evolution, Cell Biology, Genetics, Behavior, and Ecology.
3. No team will have more than one opportunity to answer a toss-up question. If neither team answers a toss-up correctly, the moderator will proceed to the next toss-up question.
4. Questions are either multiple-choice or short-answer. A player may answer a multiple-choice question with either the letter answer (W, X, Y or Z) or the verbal answer; however, if the verbal answer is given, it must be exactly as indicated in the question or as read by the moderator. However, when the choices are mathematical expressions

that would be conventionally written in symbols, common alternate expressions of the answer shall be accepted. For example, “square root of 2” and “square root 2” would both be accepted; “sine x” and “sine of x” would both be accepted. The only acceptable answer to a multiple-choice question will be the best of the 4 choices indicated in the question; in the event that more than one of the 4 choices is equally correct, then any of the correct choices will be acceptable.

5. Once read in its entirety, a question will not be re-read.
6. For toss-up questions, the first player on either team to activate the lock-out buzzer system (or “buzz in”) earns the right to answer the question, except that no player may buzz in until AFTER the moderator has identified the subject area of the question. If a player buzzes in prior to the reading of the subject area, the moderator will inform the player that they have buzzed in too soon, and may add time back to the clock, if necessary, with the player remaining eligible to buzz in.
7. If the buzzer system demonstrably malfunctions during the play of a toss-up question for which both teams are still eligible, and the officials cannot ascertain which of two players on opposing teams was first to attempt to buzz in, the game clock will be paused, the question will be discarded, and the buzzer system will be repaired or replaced. (If the two players are on the same team, the officials will decide which should be recognized to complete play of the question.) When play is ready to resume, the next toss-up question will be offered to both teams. If this situation occurs on the last question of the round, the officials will obtain a replacement toss-up question.
8. On any toss-up or bonus question, the first response given, as determined by the officials, is the only one that counts. However, if a player gives both a letter answer and a scientific answer to a multiple choice question, both parts must be correct. Any prefacing, intermediate, or subsequent remarks that do not directly answer the question, such as “my answer is” or repeating the question, will be considered delaying the game and counted as an incorrect answer. (Note: a very short “um”, “er”, or vocal stumble is acceptable, provided the officials do not consider it delaying the game.) The officials may interrupt a player in the process of giving an incorrect answer at any time, so as to continue the flow of the game.
9. If the first team’s answer to a toss-up question is wrong and the question was completely read, the other team is given the opportunity to answer it. The second team is allowed another 5 seconds to buzz in after the moderator indicates the answer is wrong or that a blurt or verbal communication has occurred.
10. The answer to a bonus question must come from the team’s captain. The moderator must ignore an answer from anyone other than the captain on the bonus question. If the moderator inadvertently responds to someone other than the captain while indicating whether an answer is correct, or to the captain before the answer is being given, the officials will replace the game time used in that bonus, and the next bonus question will be read to the team playing the bonus. If this situation occurs on the last question of the round, the officials will obtain a replacement bonus question.
11. The team that is not playing a bonus question or that has lost its opportunity at a toss-up question must not distract the opposing team while it hears and answers the question. If

the non-playing team engages in behavior that is visually, verbally, or audibly distracting, the opposing team will be awarded the following:

- a) For toss-up questions: 4 points for the toss-up question and the opportunity to answer the bonus question. The moderator will then proceed to the next toss-up.
- b) For bonus questions: 10 points for the bonus question. The moderator will then proceed to the next toss-up.

Deliberately buzzing during questions for the opposing team will be called a distraction. However, during each round, each team will be allowed one "accidental" buzz during questions for the opposing team. The first accidental buzz by a team during a game will not extend the period the opposing team is allotted to play its toss-up or bonus question. All subsequent accidental buzzes by that team during questions will be called distractions.

12. The only player who may answer a toss-up question is the one who has buzzed in first. Before answering a toss-up question, the team member who has buzzed in must be verbally recognized by the recognizer, moderator, or question judge using their player designation, e.g., A-2, B-3, A-captain, etc. (Before the match, the official who will be recognizing players will be identified.) If the player that has buzzed in answers or otherwise speaks before being recognized, it is termed a blurt. (Involuntary sounds such as sneezes will be ignored.) The moderator will not indicate whether the answer was correct or not, and no points will be awarded, but the blurting team will be ineligible to answer the toss-up question. The toss-up question is then offered to the opposing team, if still eligible. If the question has not been completely read, the question will be reread in its entirety, and the opposing team will have an opportunity to answer the toss-up question, and, if correct, an opportunity to answer the bonus question.
13. On toss-up questions, team members may communicate with each other quietly and non-verbally (e.g., in writing or by hand-signals). They may not, however, audibly communicate verbally, mouth words or use audible signals such as tapping. If these proscribed communications occur at any point during play of a question, or if any team member gives an answer without buzzing in, the moderator will not indicate whether the answer given was correct or not, and the team loses the right to answer the toss-up question. The question is then offered to the opposing team, if still eligible.
14. If both teams are eligible to answer a toss-up question, a player has buzzed in, and a player from the opposing team gives an answer, the answer of the second player will be treated as audible verbal communication, as in Rule 13. If the team of the player who incorrectly answers was ineligible for the toss-up question, this is treated as a distraction. If the action of an opposing team player answering happens near the end of a half, the officials may put time back on the clock, if necessary.
15. If the moderator inadvertently gives the answer to a toss-up question without giving either team a chance to respond, the moderator will proceed to the next toss-up question. If this situation occurs on the last question of a round, the officials will obtain a replacement toss-up question.
16. On a toss-up question, after an incorrect answer, a blurt, or verbal communication, if the moderator inadvertently gives the answer before allowing the second team to respond, the next toss-up question will be read to the second team in place of the

inadvertently-answered question. If this situation occurs on the last question of a round, the officials will obtain a replacement toss-up question.

17. On a toss-up question, if the moderator inadvertently recognizes a player other than the one who buzzed in, the player who buzzed in will be allowed to answer as though they had been correctly recognized. If the player who was inadvertently recognized answers the question and is from the same team as the player who buzzed in, it will be considered audible verbal communication as in Rule 13. If the player who was inadvertently recognized answers the question and is from the opposing team from the player who buzzed in, it will be treated as in Rule 14.
18. After reading a toss-up question, the officials will allow 5 seconds for the 2 teams to respond before proceeding to the next toss-up question. Timing will begin after the moderator has completed reading the toss-up question, including all choices on a multiple-choice question.
19. A player who has buzzed in on a toss-up question must answer the question promptly after being verbally recognized by the moderator or question judge. After recognizing a player, the moderator will allow for a natural pause (up to 2 seconds), but if the moderator determines that stalling has occurred, it will be treated as a wrong answer.
20. After a team member has answered a toss-up question correctly, the team will be given the opportunity to answer a bonus question. The team will have 20 seconds for its captain to begin to give its answer to the bonus question; timing will begin after the moderator has completed reading the bonus question, including all choices on a multiple-choice question.
21. On a bonus question, the signal "5 SECONDS" will be given by the timekeeper after 15 seconds of the allowed 20 seconds have elapsed. Additionally, the timekeeper will indicate the end of the 20-second bonus period by saying "TIME." If the team captain has not begun the response before the timekeeper calls "TIME," the answer does not count. If the team captain has begun the response, they may complete the answer, but must proceed through it without stalling.
22. Toss-up questions are worth 4 points, and bonus questions are worth 10 points.
23. If a toss-up question is interrupted (that is, not completely read by the moderator), the player is recognized, and the answer is correct, the team will receive 4 points. For any other circumstance (such as a wrong answer, a blurt, or audible communication), 4 points will be added to the opposing team's score. If the opposing team is still eligible for the toss-up, it will have the toss-up question reread from the beginning, be given an opportunity to answer it, and, if correct, have an opportunity to answer the bonus question.
24. The "double interrupt". If a toss-up question is interrupted and a team incurs a penalty as in the previous rule, 4 points are added to the opposing team's score. The moderator will then proceed to re-read the question from the beginning. However, if the opposing team buzzes in at any time before the re-reading is completed and subsequently incurs a penalty as in the previous rule, 4 points will be added to the first team's score, and the moderator will proceed to the next toss-up question. (Note that this is the only situation in which both teams gain points on a question.)

25. Challenges must be made before the moderator begins the next question (that is, reads the question's scientific category), or, for the last question of a half, within 3 seconds of the end of that half. No challenges may be made during the play of a question. All challenges must come from the 4 members of each team who are actively competing. The fifth team member, coach, and others associated with a team must not become involved in challenges or their discussion. If anyone associated with a team, other than the 4 active team members, initiates or discusses a challenge, the team will have the challenge ruled against it. All decisions of the judges are final. Note: Regardless of subsequent questions having begun, issues involving scoring errors can be initiated by anyone in the room, until the game officially ends, three seconds after the final question is over. If such issues can be resolved, they may be corrected by the officials.
26. Challenges may be made either to scientific content (i.e., whether an answer is scientifically correct or not) or to the administration of the rules (i.e., whether the rules are being correctly interpreted and applied). Challenges may NOT be made to judgment calls by the officials, including, but not limited to, whether a question has been interrupted, whether 5 seconds have elapsed before a player buzzes in on a toss-up, whether 20 seconds have elapsed before a captain begins answering a bonus, whether the non-playing team has engaged in distracting behavior during a question, whether a half has expired before a new toss-up question begins, whether a stall or blurt has occurred, whether players have audibly verbally communicated during a toss-up, whether a player has given a first response, whether an answer has been pronounced correctly, whether an answer to a multiple choice question is exact, whether a verbal answer to a short-answer list question is sufficient, whether time should be added back to the clock, whether a buzzer system has malfunctioned (and, if so, whether the first player to buzz in can be identified), or whether a non-playing audience member has shouted an answer, including whether the shouter is associated with one of the 2 teams.
27. Challenges to scientific content will be limited to 2 unsuccessful challenges per team per round, including tiebreaker questions. Successful challenges do not count against this limit. After the second unsuccessful challenge for a team during a round, that team will not be allowed any further challenges to scientific content during that round. Challenges to rules may be made at any time a question is not in play; however, whether a scientific challenge has been made and whether it has been successful are judgment calls, and may not be challenged, as per Rule 26.
28. If a team's answer to a toss-up question is judged incorrect, and they wish to challenge the ruling on the basis of scientific content, but the opposing team is still eligible for the toss-up, the first team must hold its challenge until after the opposing team has completed its toss-up opportunity. The first team should then state its challenge before the next bonus or toss-up question is begun. If the challenge is denied, play will proceed as usual from the end of the second team's answer. If the challenge is upheld, the second team's answer will be disregarded, as will any scoring for either team due to the second team's answer, and the time lost since the first team's answer was disallowed will be put back on the clock. The first team will then be awarded 4 points and have the opportunity to answer the bonus question.

29. If a team's answer to a toss-up question is judged correct, the opposing team challenges the ruling, and the challenge is upheld, the first team's answer will be treated as incorrect. If the second team is still eligible to answer the toss-up question, it will be read the next toss-up question. If this situation occurs on the last question of a round, the officials will obtain a replacement toss-up question.
30. Substitutions may be made only at the beginning of a half or tiebreaker round. If a team has 5 players, any 4 players may play during any half or tiebreaker round. Teams may switch captains, but only at the beginning of a half or tiebreaker round.
31. No one in the audience may communicate with players during the match; communication will result in ejection from the competition room. The officials may clear the room of coaches, substitutes, and spectators if communication is suspected. If someone in the audience shouts out an answer, and the team with which the shouter is associated can be determined, that team will forfeit the match. If the shouter cannot be determined by the officials to be associated with either team, the room will be cleared of everyone other than the officials and the eight players currently playing; the officials will add time back to the clock, and the question will be replaced with the next toss-up or bonus (whichever is appropriate). If this occurs on the last question of a round, one additional toss-up and/or bonus question will be obtained to finish the game. No notes may be brought to the competition table. Nothing may be written before the clock starts. Scratch paper will be provided at the beginning of each match and collected at half-time and at the conclusion of the match.
32. Calculators, banner pens, periodic tables, or other charts, etc. are not permitted during play. The team of a player using such items during play will be disqualified from the tournament.
33. At all times, players and coaches should conduct themselves with honor, respect, and good sportsmanship. The Tournament Director may disqualify any player, coach, or team engaging in conduct judged to be detrimental to the National Science Bowl

# Elimination Round Scoring Summary:

Science Bowl Rules Flowchart

