The MODERATOR is THE person responsible for controlling each match.
The Moderator must be extremely familiar with how the game is played and with all of the contest rules.
It is, therefore, extremely important that you review the rules well in advance of the actual event. Additionally,
you need to be familiar with the questions used in the competition.

Pre-Competition Question Review
*You will be provided with the question bank for your competition in advance of the actual event. It is
important that you review all the questions before the competition and meet with the Regional
Coordinator, other Moderators and Science judges to ensure question accuracy. Our “repairs” will be
submitted to NOSB for consideration. NOSB makes final determination on which corrections to accept.
*NOSB has replaced the hardcopy question books with eOSB, an electronic book format. All BCB Moderators
and Science Judges will use the eOSB. Because we are using eOSB, after NOSB issues its final revisions to
the question bank, no further changes or tailoring of questions will be possible. Hardcopy notebooks will
be held at Crab Pot Central and the TCQ Grading Room for reference.
*As preparation for the competition, please practice using the eOSB program and reading the questions out
loud in order to: (1) help ensure that you read the questions smoothly;
(2) become proficient with the pronunciations of scientific terms
*As requested by your RC, participate in eNOSB webinar and other training sessions.

Competition Responsibilities
The National Ocean Sciences Bowl is primarily an oral competition in which two student teams attempt to
answer toss-up, bonus and Team Challenge questions. A competition round consists of: 1st 6-minute Buzzer
Segment (toss-up & bonus questions); 2 Team Challenge Questions; 2+minute break (for question grading in
a separate room); 2nd 6-minute Buzzer Segment.

1. Before the match begins, the Moderator:
   ✓Records school names & officials’ names on the paper Score Sheet;
   ✓Calls the group to order;
   *Introduces officials;
   *Asks students to introduce themselves & press their buzzer to test the system;
   *Asks coaches to stand, introduce themselves & shake hands.

2. The Moderator reads the “Important Rules” at the start of the first Buzzer Round and before the
   Team Challenge Questions (these rules come with the TCQ packet).

3. Moderator reads the questions. Be sure to position your laptop computer (with eOSB) so that
   students cannot see the questions – hold at a steep angle or position behind a visual screen. The
   competition clock begins as soon as the Moderator has identified the “format” designation of the
   first toss-up question (e.g. multiple-choice).
   a) There are 20 toss-up/bonus question pairs assigned per round.
      *Please, pace your reading of the questions. You stop the 1st buzzer segment after reading
      Question Pair #10 or 6 minutes, whichever comes first.
      Then, resume the 2nd buzzer segment where you left off in the eOSB program.
      *Replacement Toss-Up questions: There are no separate replacement questions. If a question
      has to be tossed, proceed to the next question pair in sequence. See NOSB 2015 Rules #51.
b) Before reading the question, the Moderator identifies: 1) whether the question is a toss-up or bonus; and 2) its format - whether it is multiple-choice or short-answer. Subject areas are no longer provided since many questions are multidisciplinary. Additionally, “difficulty ratings” for questions should no longer appear, if they do – do not read them to students.

c) When a contestant elects to answer the toss-up question by buzzing in, the buzzer system identifies the 1st student to respond & locks out all other competitors.

*The Moderator verbally recognizes the student as “Red Team or White Team, player__”). Should the student answer the toss-up question correctly, the student’s team receives 4 points and is awarded a bonus question. A correct answer to the bonus questions results in the team receiving an additional 6 points.

*If neither team correctly answers a question, the Moderator must read the correct answer for toss-up and bonus questions.

*Before the next toss-up question is read, the Science Judge resets the buzzer system, so that individuals can buzz in again. The Moderator may reset the system, if the Science Judge does not.

*Play then continues as the Moderator reads the next toss-up question to the two teams.

4. A student MUST wait to be verbally recognized by the Moderator before beginning to answer the toss-up questions.

a) If a student blurts out an answer without buzzing in, buzzes in before the question “format” has been read, or buzzes in, but answers before being verbally recognized, the response is a “Blurt” and is ignored (Note: you should not reveal whether the answer was correct or incorrect).

*You announce “Blurt” from Team ___, then the opposing team has the opportunity to answer the question. If the question was not fully read, you re-read it in its entirety for the opposing team. This rule is helps avoid situations where players lack self control or two players think they have activated the lock-out system and blurt out simultaneous answers. See NOSB 2015 Rules #18 & 19.

b) If a student buzzes in during the reading of the question, this is an “Interrupt.”

*You announce “Interrupt,” then verbally recognize the team and student. See NOSB 2015 Rule #20.

If student answers correctly, that team is awarded 4 points, and the team wins the right to answer a bonus question. If the student interrupts the question, is verbally recognized, but answers the toss-up question incorrectly, 4 points are deducted from the score of the student’s team and the question is re-read in its entirety for the opposing team. That team may answer the toss-up question for a chance at the bonus.

5. Stalling is not allowed. Pay particular attention to the clock at the end of the round, especially the last 30 seconds. Teams use strategies to use up time on the clock.

a) It is not stalling: if a team waits the full 20 seconds to answer a bonus question;

It is not stalling if a team prefaces the answer to a bonus question (only) with “Our answer is...”.

b) It IS stalling: if the answer is long and rambling, with no clear relation to the correct answer options allowed.

c) Note: The preface “My answer is...” is NOT allowed for Toss-Up questions.

While the Moderator concentrates on the questions and answers, the Rules Judge is attentive to the time and how students may be using it. If a team challenges on the basis of stalling, the Rules Judge is the authority in the room (no call to the Chief Judge).

6. If the question has not been answered correctly, read the correct answer as offered in the eOSB.
book, but do not explain or discuss it, unless there is a challenge. The Moderator may expect the Science Judge to address scientific challenges.

7. **Review rules for “when times runs out”** and refer to the flow chart to determine when and how to proceed with questions when time is up at the end of a buzzer round. NOSB Rules #56-61.

   The Science Judge pays attention to the words the Moderator is reading and saying, particularly at the end of the round, so that when the buzzer goes off, they can corroborate whether the question was completely read. The Rules Judge also pays attention.

8. **The Moderator announces that it is time for the team challenge question.**
   a) The Science Judge hands the Moderator their copy of the TCQ & gives the rest of the packet to the Rules Judge.
   b) **The Moderator has a short announcement to read** to the two teams before they are told to begin the question. (This announcement will either be in the packet with question or will be taped to your table top.) Each team challenge question has a different time period, between 2 and 5 minutes in length. The Team Challenge Question is not read aloud.
   c) As the Moderator is reading the rules, the Rules Judges passes out the TCQ papers, face down, one copy in front of each team member.
   d) The Moderator tells the students when to begin. At the end of the specified time period, the team Captain turns in the paper to the Rules Judge. The a Room Runner or the Science Judge will take it to the Grading Room.
   e) After the 1st TCQ is finished, the 2nd TCQ immediately follows. A Room Runner or the Science Judge takes the 2nd TCQ to the Grading Room.

9. Following the completion of the 2nd TCQ, there is a minimum 2 minutes half-time break, while the TCQs are being graded. During this time:
   a) coaches may rotate in their alternate players and provide coaching;
   b) team members (players, alternates, coaches) **may not** leave the room;
   c) all observers returning to the competition room or new observers entering the room during the break MAY NOT speak to any team members. The Rules Judge monitors this.

10. The Runner or Science Judge returns with the TCQ grades. The Science Judge announces them, then passes the grade sheet to the Scorekeeper for entry into the score sheet.

11. Then, the Moderator begins the second Buzzer Segment, beginning where they left off at the 1st half. The completion clock begins once the subject is identified.

12. The game is over when the second Buzzer Segment ends or all toss-up questions have been read. The winning team is the one with the greater point total. Regarding ties - In general:
   *Round Robin matches (Rounds 1-3): points are awarded for win, loss or tie. No need to resolve a tie. Do not use Tie-Break Questions during the round-robin matches.
   *For double-elimination rounds, see tie-break rule #55. There are question sets reserved for resolving ties during these rounds. Send a Runner to get them from the RC or Head Rules Judge. Read a series of 5 toss-questions.
   *Trophy rounds: may require tie-breaker, per NOSB Rule #55. Use tie-break questions as identified by BCB Coordinator or Head Rules Judge.
13. **Fill out the official score sheet and ensure that both team captains initial it** before you leave the room for your next round. **Return the official score sheet**, all score sheets used by score keeper, and the used question packets to the Head Scorekeeper at Crab Bowl Central. Label the packet with Round # and Room #. You may assign the Runner to deliver these.

14. **Moderators manage Challenges and Warnings as needed**, coordinating match officials in making these determinations. Review NOSB Rules #62-70 about Challenges & Rules #71-77 regarding warnings. Please conduct any officials’ discussions/consultations outside of the room.
MODERATOR’S PREAMBLE & IMPORTANT RULES
READ BEFORE EACH MATCH

✔ Before you start the Match, record school names & officials’ names on the paper Score Sheet; then call the group to order.

Good Morning/Afternoon my name is _____ I am a __(your specialty)__ from __(institution)___. I will be your Moderator. Other officials, please introduce yourselves: __________, __________, __________, __________, __________.  

(The first three rules should be read before each competition round begins, even if the teams choose to waive the reading of the rules. This is to inform the audience.)

Before we get started, I would like the coaches of both teams to stand. Please introduce yourselves, shake hands, and sit together in the Coaches’ seating. Alternate team members should also stand, introduce themselves, and sit with the Coaches in their designated seating during the match.

Players: please state your name and buzz-in to verify that your systems are working properly.

Please let me remind you and the audience of several important rules we will be carefully observing during this match.

1. **ALL electronic devises** (i.e. cell phones, smart watches, tablets, laptops, calculators, etc.) must be turned off and kept in a pocket, purse or bag throughout the entire competition round, even during the 2 minute break.

2. With the exception of the Bowl Event Program, audience members may NOT take any notes, or review any reading materials (i.e. textbooks, novels, or papers) during the entire competition round, even including the 2 minute break.

3. When a competition starts no one may leave or enter the room, except the approved event photographer and the room runners.

-----Do you want me to read the rest of the rules in their entirety?----------------------------------

4. On toss-up questions, you MUST be verbally recognized by the Moderator before replying. If you respond before being verbally recognized, your team is automatically disqualified from answering the question. The question will then be offered as a toss-up question to the opposing team.

5. In this match, I will identify you by saying either Red or White and either Participant (or Player) "1", "2", "3", or "Captain".

6. For toss-up questions there can be no conferring among team members ON EITHER TEAM at ANY time. If conferring occurs on the team that was initially recognized to answer the question, that team is disqualified from answering the question and the question is offered to the opposing team. If conferring occurs or has occurred, on the opposing team, they too are disqualified from answering the question.
7. With the exception of articles such as “a”, “an,” and “the,” answers to multiple choice questions must be exactly as those on the written page. Prefacing the answer with “My answer is” is NOT acceptable on a toss-up question, but is optional on a bonus question.

8. For bonus questions you have 20 seconds AFTER the Moderator finishes reading the question to begin your answer to the question. You will hear the Timekeeper say "5 SECONDS," when you have only 5 seconds left to begin your answer. If you fail to begin your answer before the Timekeeper says "TIME," you have missed your bonus question.

9. For bonus questions only the team captain's answer will be accepted. Once the team captain begins his or her answer, no further conferring or clarification may occur by other team members.

10. There are two types of challenges that team members may make during a game: challenges to the scientific answer and challenges to the enforcement of the competition rules. The team member requesting a challenge will raise their hand and request a challenge from the Moderator BEFORE the moderator begins the next question. All challenges must come from the team members who are actively competing. Neither the alternate nor any other audience member may object.

11. If the challenge can be resolved in the room, the competition officials will collectively make a ruling on the challenge. If the team requesting the challenge disagrees with the first ruling, they can challenge a second and final time.

12. For all challenges made a second time, it must go out of the competition room to the Judges’ Appeal Room where all decisions are final. NO EXCEPTIONS.

13. Only the timekeeper or other competition official can stop the game clock during a challenge.

14. Competition officials may issue warnings to individual players, entire teams, or to members of the audience that display inappropriate behavior. The official verbal warning along with the reason for the warning will be issued by the Rules Judge. The warning(s) for both players and audience members will be noted on the Official Score Sheets and tallied throughout the entire competition.

15. If a player or team receives two (2) official warnings throughout the entirety of the competition, that player or team will be disqualified from competing and will only be permitted to observe the competition.

16. If an audience member receives two (2) official warnings they will not be permitted to observe or participate in the competition activities for the remainder of the event.

Are we All Ready? Judges? Teams? First question..........
Moderator’s Preamble & Rules before Team Challenge Questions:

TCQ #1

1. It is time for the Team Challenge Questions.
   *Teams: Do NOT turn the papers over until I instruct you to do so.
   *During this portion of the competition, I would like to remind the audience that they should remain quiet and seated until the break is called. The audience will be able to see the question on the overhead while the participants are working on their answer.
   *There is NO break between the first and second TCQ. Please, no talking, moving around or leaving the room until I announce the break.

2. Teams are encouraged to work together on this question. However, only the answer sheet handed in by the Captain will be graded.

3. Please write the Round #, your school name and the competition room number, which is ________________________________ , on the back of your sheets now.

4. You will have _____ minutes to answer this question. The timekeeper will indicate when 45 seconds and 15 seconds are remaining. When time is called please put your pencils down.

5. The papers will be collected from the Captain of each team.

Questions? You may now turn over the paper in front of you and begin.

TCQ #2:

6. We will continue with Team Challenge Question #2. As before:
   *Teams will NOT turn the papers over until I instruct you to do so.
   *The audience should remain quiet and seated until the break is called. The audience will be able to see the question on the overhead while the participants are working on their answer.
   *Please, no talking, moving around or leaving the room until I announce the break.

7. As before, Teams are encouraged to work together on this question. However, only the answer sheet handed in by the Captain will be graded.

8. Again, write the Round #, your school name and the competition room, ________________________________ , on the back of your sheets now.

9. You will have _____ minutes to answer this question. The timekeeper will indicate when 45 seconds and 15 seconds are remaining. When time is called please put your pencils down.

Questions? You may now turn over the paper in front of you and begin.

Break:

10. We will now begin the minimum 2 minute break while the TCQs are being graded.
    The Scorekeeper will project the TCQ answer rubrics.

11. Coaches may confer with their teams, and rotate in an alternate if they choose to do so.
    But, teams may not leave the room.

We will allow spectators to enter the room at the end of this break, BUT spectators MAY NOT speak to any team member, including the coach.

When the TCQ grades arrive, I will call you back to attention and we will proceed with the second segment of the match.
Instructions for the MODERATOR’S MATCH SCORE SHEET

✓ Before the Match: RECORD officials’ names here and the names of the schools participating in this match at the bottom of this sheet. Complete the other information as well.

MODERATOR______________________________

SCIENCE JUDGE_________________________

RULES JUDGE____________________________

TIMEKEEPER______________________________

SCOREKEEPER____________________________

✓ Before the Match: READ the "IMPORTANT RULES" sheet ALOUD. This includes: asking the coaches and alternate team members to introduce themselves; checking the lock-out systems by having each student introduce him/herself.

✓ Before/after TCQ & at the end of the Match: See that the Rules Judge PICKS UP ALL PAPER at the beginning and end of the Team Challenge portion of the match as well as at the end of the round! The students are NOT to take their scratch work out of the competition room.

✓ During the Match:
  * Moderator notes any Warning(s) issued to a team(s) or individual(s) in the space provided and provides a brief description of the warning. Consult the training handout on Warnings for more details.

✓ After the Match:
  * Moderator records FINAL SCORES in the space provided & has Team CAPTAINS initial.
  * Moderator COLLECTS:
    1) Official Score Sheet (on top, outside the envelope),
    2) Scorekeeper’s transparency sheets from the overhead, (2nd, outside the envelope) as well as
    3) all TCQ question materials (inside the envelope), student scratch papers, etc.
  * MARK THE PACKET with Round #, Room #.
  * The Runner takes the Match PACKET TO HEAD SCOREKEEPER at Crab Pot Central.

The Official Match Score Sheets will be provided in a folder in each Competition Room Box. There will be enough sheets for all your scheduled matches, plus 2 extras.
Your duties as a Blue Crab Bowl RULES JUDGE include:

Full understanding of the latest NOSB rules & BCB conventions. Stand at the front of the room, where you can see both the competing teams and the audience. Watch and listen for any violations of rules by teams, for any signs of inappropriate communication between audience members (coach, alternates, other observers) and the competitors or officials. Listen/watch for errors missed or made by fellow Officials and correct as needed.

1. You are responsible for organizing Team practice sessions for your team of Match officials. The RC will facilitate with room arrangements, equipment, etc.

2. On Bowl Day, you need to check the set up/break-down the Competition Rooms before and after use. The Room Runner & Alternates should be assisting with these tasks. Be familiar with the equipment and supplies needed, the Room Box contents, how the buzzer system sets up, the positioning of the Team Labels, Moderators table, clocks, scorekeeper’s overhead set-up.

3. Before each match segment begins, collect any used scratch paper from the team tables and discard in envelope provided. Be sure there is clean scratch paper and sharpened pencils at each place. Note: students are not allowed to write anything on their scratch papers prior to the reading of the first toss-up question.

4. Watch for Scorekeeper errors. If, for example, Team A is supposed to get four points, the Rules Judge needs to make sure the Scorekeeper doesn't inadvertently credit the wrong team with those points. Teams may also asking for score correction.

5. Ensure that quiet is maintained & no signaling or other inappropriate behavior occurs. During competition play, the Rules Judge is responsible for ensuring that quiet is maintained in the room and that no inappropriate communications take place between the team members and the audience. The Runner will also be watching and may alert you to a concern.

   During competition: coaches, team members and spectators are NOT allowed to use calculators, notes or references. Teams and audience members must turn off and put away cell phones or other electronics, cameras and any other recording devices, reading or writing materials (except official event handouts). You may confiscate any such materials/devices, as needed.

   If in an inappropriate behavior occurs, you have the authority to issue a Warning (see #12 below).

6. Review rules for “when times runs out” and refer to the flow chart to determine when and how to proceed with questions when time is up at the end of a buzzer half, see 2015 NOSB Rules #56-61. The Science Judge pays attention to the words the Moderator is reading and saying, particularly at the end of the round, so that when the buzzer goes off, they can corroborate whether the question was completely read. The Rules Judge also pays attention.

7. Stalling is not allowed. Pay particular attention to the clock at the end of the round, especially the last 30 seconds. Teams use strategies to use up time on the clock.
   a) When answering toss-up questions, players may NOT include” My answer is...”
b) When answering bonus questions, it is acceptable: if a team waits the full 20 seconds to answer a bonus question; or if a team prefaces the answer with “Our answer is...”.

c) It is stalling: if an answer is long and rambling, with no clear relation to the correct answer options allowed.

While the Moderator concentrates on the questions and answers, the Rules Judge is attentive to the time and how students may be using it. If a team challenges on the basis of stalling, the Rules Judge is the authority in the room (no call to the Chief Judge).

8. **Hand out the Team Challenge Questions:**
   a) Science Judge has the TCQ packets, gives the Moderator a copy, then passes the packet to Rules Judge.
   b) Rules Judge collects any note papers the students may have on their table.
   c) Then passes out student copies: 1 copy, face-down, in front of each competitor.
   d) Hand 2 transparencies w/ coversheets (question & answer) to scorekeeper to post. The Scorekeeper can post the question transparency while contestants are working on that question.
   e) Collect all the scratch paper and items associated with the 1st completed question, and put in the TCQ packet envelope, before 2nd TCQ is distributed.
   f) Only after all competitors’ answers for both TCQs have been handed in, should the Scorekeeper post the TCQ answer transparencies. Watch the Scorekeeper and help them avoid mixing up the transparencies.

9. **Monitor the break:**
   a) During the half-time break (after 2nd TCQ is completed), no team members (competitors, alternates, coaches) may leave the room. If there is a urgent need, provide a Match Official to escort any team members that must leave the room, even to use the restroom.
   b) Any observers returning to the room, any new observers entering the room during the break, MAY NOT speak with the members of the competing teams.

10. **Ensure all competition rules are followed.** It is imperative that you fully understand ALL competition rules. Review Rules about Challenges, 2015 NOSB #62-70.
   a) If officials make an error in the rules, or if there is a Rules Challenge from a team member – tell the Timekeeper to stop the clock. Officials will confer if needed (outside the room) and you announce the result. Add time back to the clock as needed.
   b) If the team requesting the challenge disagrees with the ruling, they may challenge a second time and the ruling is made in the Judges’ Appeal Room, no future challenges are accepted.

11. **Warnings:** Consult the new NOSB 2015 rules #71-#77 regarding warnings. Warnings may be issued to individual players, entire teams, or members of the audience. Remember to **Call time out if**, during the competition, you should witness or have to discuss a rule violation/error with the Moderator during a round. Please be certain the Timekeeper has stopped the clock.

After conferring with other room officials (outside the room), you issue the official verbal warning and provide the reason. If you feel that time has been lost, check with the Moderator, who is allowed to add time back to the competition clock. If you encounter difficulty, send the Runner for the Head Judge or BCB Coordinator. When the Head Judge arrives, step outside the competition room to relate the problem. Then re-enter the room with the Head Judge to give the pronouncement or to gather more information from participants. The Moderator should record any Warnings in the official match score sheet (paper version).
Pre-Competition Question Review

*Questions in each subject area have been reviewed to eliminate erroneous or ambiguous questions. A multiple-choice format is used for many questions in order to limit the possible correct answers to just one choice. But, where other scientific answers may be possible, the correct answer is limited to the BEST of those offered. For short answer questions, acceptable alternative answers have been identified. Nevertheless, it is important for each region to conduct a review of the questions to be used for their competition.

*You will be provided with the question bank for your competition in advance of the actual event. It is important that you review all the questions by the deadline and meet with the Regional Coordinator, other Moderators and Science judges to ensure question accuracy. Our “repairs” will be submitted to NOSB for consideration. NOSB makes final determination on which corrections to accept.

*NOSB has replaced the hardcopy question books with eOSB, an electronic book format. All BCB Moderators and all Science Judges will use the eOSB. Hardcopy notebooks will be held at Crab Pot Central and the TCQ Grading Room for reference.

*Because we are using eOSB, after NOSB issues its final revisions to the question bank, no further changes or tailoring of questions will be possible.

*As requested by your RC, participate in eNOSB webinar and other training sessions.

*As preparation for the competition, Moderators practice using the eOSB program and reading the questions out loud in order to: (1) help ensure that they read the questions smoothly; and (2) are able to pronounce scientific terms. You are the Moderator’s back-up, please assist or correct your Moderator as needed.

Competition Responsibilities

1. **Follow the questions read by the Moderator:** You will have laptop computer and the same eOSB electronic notebook system for delivering the Questions. As the Moderator reads a question, please follow along to make sure the correct questions are being read and that they are read correctly. You are the Moderator’s back-up.
   a) Ensure that the Moderator is reading from the correct round and question pair.
   b) Ensure that the Moderator has read each question correctly and that all words are correctly pronounced. Correct the pronunciation immediately if a word is mispronounced.
   c) Ensure the Moderator stops reading after completing Question Pair #10 for the 1st buzzer segment. And, for the 2nd buzzer segment, begins reading where they left off.

2. When a contestant elects to answer the toss-up question by buzzing in:
   **The Science Judge resets the buzzer system.** (As soon as the 1st player buzzes in, the system "locks out" all other contestants and identifies the student who wishes to answer the toss-up question).
   *Between Toss-Up & Bonus questions of a pair, leave the “lock out” on so the opposing team doesn’t buzz in by accident.
   *Before the next toss-up question begins (or after the bonus question has been answered), push the red button to reset the system.
   *If a student’s Toss-Up answer is incorrect OR in the event of a blurt, a team is disqualified. Then, reset the system answer so the other team can buzz in.
   *If the Science Judge fails to reset the buzzer lock-out system, the Moderator may do so.

3. **IF neither team correctly answers a question correctly, the Moderator must read the correct answer for toss-up and bonus questions. Help them remember to do so by prompting as necessary:**
4. Review rules for “when times runs out” and refer to the flow chart to determine when and how to proceed with questions when time is up at the end of a buzzer round. 2015 Rules #56-61.
   * The Science Judge pays attention to the words the Moderator is reading and saying, particularly at the end of the round, so that when the buzzer goes off, they can corroborate whether the question was completely read. The Rules Judge also pays attention.

5. At the Officials’ Meeting in the morning, you will be asked to pick-up Team Challenge Question packets. Exact procedures will be announced on Bowl Day at the Officials’ Meeting or before.

6. Team Challenge Questions. You or a Room Runner will take the teams’ answers to the 1st TCQ to the Grading/Judges Appeals Room and remain there to assist the graders if requested. You or a Room Runner will deliver the 2nd TCQ to the Grading Room.
   a) If the Room Runner delivers the TCQs, the Science Judge remains in the competition room and during the half-time break assists with projecting (reviewing) answers to the TCQs.
   b) If the Science Judge delivers TCQs to the Grading room:
      • Please, do not interfere with the TCQ graders unless asked to contribute. We need to insure that all team challenge questions are graded similarly.
      • Once the TCQs are graded, you return to your competition room and announce the grading results at the beginning of the second half. Give the grade sheet to the Scorekeeper so they can correctly enter scores on the score sheet. The Moderator should not begin the toss-up questions of the second half until the TCQ points have been entered into the score sheet.
      • If time permits and there is demand, you may briefly review the official TCQ answers as provided on the overheads. No long discussions, please.

7. The SCIENCE JUDGE rules on scientific answer acceptability and any scientific challenges to question content or answers. See 2015 NOSB Rules about Challenges, #62-70.
   a) A student’s answer to multiple-choice question must be identical to the wording in eOSB or the Question Notebook (see 2015 Rules #21 & 22). The first answer given is the only one that counts. Answers to toss-ups may NOT be preceded by “My answer is.”
   b) Short answers must have the same meaning as the answer(s) in eOSB or the Notebook (see 2015 Rule #21). The Science Judge makes a determination on whether the answer is acceptable or not. On bonus questions, prefacing the answer with “My answer is…” is allowed (Rule#28).
   c) Should a question be challenged, coordinate with the Moderator to follow the steps outlined in the Challenges & Rulings summary and 2015 NOSB Rules about Challenges #62-70.
      * First, see that the competition clock is stopped.
      * Then, using your expertise and that of the Moderator or other Officials in the room, attempt to resolve the challenge without outside assistance, if at all possible.
      * If a challenge arises which is outside the fields of the officials in your room or a student issues a 2nd challenge, go to Judges' Grading & Appeals Room to discuss the challenge. The Grading Room should have someone in each of the sciences who can resolve the issue, and/or reference books or internet access to corroborate an answer. Once you report a decision back in the game room, that decision is final.
      * Should you feel that time was lost as a result of the interruption (5, 10, or 15 seconds, or more, for example), check with the Moderator & Rules Judge and ask that time be added back onto the clock before resuming the competition. Be certain to announce that you are "correcting" the time because time was lost due to the interruption so that participants understand what is happening.
Your duty as a Blue Crab Bowl SCOREKEEPER is to:

1. **Accurately award points and record the competition score.** Scores will be recorded on a blackboard or with an overhead projector that should be visible to all contestants and NOSB officials. See Scoring Rules #46-51 in the 2015 NOSB Rules. The point awards are:
   - Toss-up questions, correct answer = 4 points
   - Bonus questions, correct answer = 6 points
   - Team Challenge Questions = 0-20 points (partial credit awarded by graders)
   - Interrupt*, but incorrect answer = minus 4 points
   - Blurt* (not recognized), correct or incorrect answer = 0

2. **Definitions**: See NOSB rules #18 - #20, clarifying “blurt” and “interrupt.”
   See Score rules #47 & 48 regarding scoring these kinds of answers.
   - **Interrupt**: a contestant buzzes in, interrupting the Moderator’s reading of the toss-up question, is recognized by the Moderator, but gives the wrong answer. Four points [4] are then deducted from the contestant’s team. The opposing team is given the opportunity to answer the interrupted question after it is re-read in its entirety; and, if a member of the opposing team answers the toss-up correctly, they receive 4 points for the toss-up question and are then asked the bonus question. Score Rule #47.
   - **Blurt**: student blurts out an answer (correct or incorrect) without buzzing in, OR before the Moderator reads the “format” designation of the question, OR without being recognized by the Moderator, then = NO points are awarded or subtracted. But, the blurring team forfeits its chance to answer that question. The question goes to the opposing team, as appropriate. Score Rule #48.

3. **As you keep track of the score on the overhead transparency, two columns should be recorded for each team.** See the Scoresheet model on the next page.
   - a) In the first 3 columns, keep a **Running Tally**, recording the points a team receives on each individual question with toss-up, bonus, and interrupts recorded separately.
   - Record each of the Team Challenge Questions #1 and #2 on a line of their own.
   - b) The fourth column (far right) should contain a **Cumulative Total** of the team’s points.
   - If recorded in this fashion, point totals can be easily checked at the end of the round.
   - c) Each row in the score sheet represents 1 (one) question pair. For each question pair, record points for both teams, even if they earn 0 points.
   - d) **HINT**: Turn off the overhead projector light while you are calculating totals. Check your work, then turn the light back on. This gives you some privacy & helps avoid math errors. The teams and audience will be watching you closely. The Rules Judge is also supposed to check your match, so watch for signals from them.

4. The Rules Judge will hand you the **TCQ transparencies to post for the audience.**
   - **Turn off the projector while you load the transparencies.** Post only the Question transparency for the audience to review while the students are working. Please, PAY ATTENTION, don’t accidentally post the answers at this time! During the break (while the TCQ are being graded), you will post the Answer transparencies for the audience to see.
5. After the Science Judge returns with the TCQ grades and announces the scores, he/she should hand the grade sheet to you, so that you can assure accuracy in the entry of scores.

6. At the end of the game: **Announce the final score.**

   **Hand the score overhead sheet(s) to the Moderator** so that they are included with the paper official score sheet the Moderator completes. Put all used TCQ transparencies into the match packet that will be taken to Crab Bowl Central by the runner.

### Scoring Matrix for Toss-Up Questions

<table>
<thead>
<tr>
<th>Type of Response</th>
<th>Correct Answer</th>
<th>Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognized</td>
<td>+4</td>
<td>0</td>
</tr>
<tr>
<td>Interrupt</td>
<td>+4</td>
<td>-4</td>
</tr>
<tr>
<td>Blurt</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### eOSB System Scoring Option

The NOSB electronic notebook software includes a Scorekeeping function that the Moderator can enable. As questions are answered, the Moderator selects correct, incorrect or interrupt and the scoring program automatically adds the score. The total cumulative score appears on the Moderator’s screen and has to be projected onto a separate monitor that can be seen by the Competitors.
Your duties as a Blue Crab Bowl TIMEKEEPER include:

Your job is to keep focused on the time, NOT the game. But, you do have to be aware of any events that may stop the clock during the regular competition time periods.

You keep time on 2 levels:

- The overall round time limits for Buzzer Rounds and Team Challenge Question rounds;
- The time limits surrounding team and individual responses to each buzzer round question (toss-up, bonus questions).

Be sure you have reviewed and are familiar with the rules, and the “when time runs out” procedures. See Timing Rules #37-45 in the 2015 NOSB Competition Rules, also see Rules #56-61 re: When Time Runs Out, and Rules #68, 69 & 72 regarding stopping the clock for Challenges & Warnings.

1. **Operate the official competition time clock.** You will be provided with a clock that shows both minutes and seconds. **This clock must be visible to both teams at all times.**
   - *At the beginning of each of the match’s buzzer segments, set the clock at six (6) minutes.
   - *The clock should be started as soon as the Moderator reads the “format” designation for the first toss-up question (e.g. multiple choice).
   - *The clock should be allowed to run uninterrupted until time expires UNLESS there is a challenge or warning is issued. See #7 below.
   - *At half-time, call "HALF" and at the end of the game call "GAME."

2. **Keep track of 5-second time limit for toss-up question response.**
   On toss-up questions during the Buzzer Rounds, one of the teams must answer within 5 seconds of the Moderator’s completing the question. Keep track of the 5 seconds allowed, calling "time" so that the Moderator will know to proceed to the next toss-up question.

3. **Keep track of 20-second time limit for bonus questions.** Each time a team correctly answers a toss-up question, they will be awarded a bonus question. The students have 20 seconds to answer the bonus question AFTER the Moderator has finished reading the bonus question.
   - **When 5 seconds of the 20-second bonus period remain, please say "5 SECONDS."**
     This is to alert the students that only 5 seconds are left to offer their answer.
   - **At the end of the bonus time period you will simply say "TIME."**
     Please say this loudly enough for all participants to hear. Generally, it will be sufficient for you to time the 20-second interval by reading the clock provided for the match. However, a stopwatch may also be used for this purpose.
4. **At the conclusion of first buzzer segment, it is time for the Team Challenge Questions.**
   *Use the game clock to time the TCQs.* The Moderator will tell you how much time is allotted for each of the 2 TCQs. The teams must be able to see the clock.

5. **Keep track of time for team challenge questions.** Teams have from two (2) to five (5) minutes to answer the team challenge question after the paper is handed out to them and the Moderator says “begin.”
   *When 45 seconds in the team challenge period remain, please say "45 SECONDS."
   This is to alert the students that only 45 seconds remain in their team challenge period.
   *When 15 seconds remain, please say "15 SECONDS". At the end of the time period you will simply say "TIME, Pencils Down." Please say this loudly enough for all participants to hear.
   *Remember that the team challenge question is followed by a half-time break of at least 2 minutes. Set the clock for 2 minutes (but the actual break may be longer while TCQs are being graded).
   *The break ends when the Science Judge returns from the Grading/Judges Appeals Room, announces the results and briefly reviews the correct answers for teams and audience.

6. **At the beginning of the second Buzzer segment,** set the clock for 6 minutes.
The game clock should be started as soon as the Moderator begins to read the “format” designation of the first question (e.g. multiple choice).
   *The clock should be allowed to run uninterrupted until time expires UNLESS there is a challenge, warning, problem (e.g. gear issue).
   *At the end of the game call "GAME."

7. **Stop the Clock!: If there is an interruption due to challenge or rule violation,** stop the game clock until the issue is resolved.
   *Restart the game clock when the Moderator begins reading “format” of the next question.
   *Add time back onto the clock if the Moderator, Science Judge or Rules Judge feels that an interruption has unduly used competition time. Again, be certain to explain to the participants that a time correction is being made.

---

**Game Clock**

- Start/Stop
- Clear

**Stop Watch**

- Start/Stop
- On/Reset
Your duties as a Blue Crab Bowl Room Runner include:

1. **Help set up the Competition Rooms** prior to competition:
   * Be familiar with the equipment & supplies checklist & Room Box contents.
   * Understand how the buzzer system sets up, positioning of team name tags, Officials table, clocks, scorekeepers overhead projection system.

2. **Assure that your respective competition rooms have functioning equipment and adequate supplies throughout competition.** Your Officials Team may rotate from one room to another.
   * When your Match Officials Team arrives at a new competition room, test the equipment and check the stock of supplies.
   * Check your Room Box for extra supplies. Replacement Buzzer Systems and Overhead Projectors will be at Crab Bowl Central.

3. At the morning Officials’ Meeting in the morning, the Science Judge (or you) may be asked to pick-up Team Challenge Question packets for Rounds 1-3. After lunch, you may be asked to pick-up Team Challenge Packets for Rounds 4-7. Exact procedures will be announced on Bowl Day at the Officials’ Meeting or before.

4. **Assist the Rules Judge in maintaining quiet and correct behavior** during competition rounds.
   * You stand at the back of the room, close to the door. Assure that no one enters or leaves after competition has officially begun.
   * Assure that quiet is maintained in the hallway outside the competition room. You may have to step out discretely and instruct people in the hall to return to the “lounge” area or to maintain quiet. If they do not comply, immediately notify the Head Rules Judge or BCB Coordinators.
   * During the competition, watch and listen for any signs of inappropriate behavior, e.g. talking, signaling between audience members and the competition team, use of reading electronic devices or other rules violations. If inappropriate behavior does occur, notify the Rules Judge (he/she has the authority to issue a warning and/or ask the person to leave the room (with discretion, of course). The Rules Judge may send you to retrieve the Head Judge or BCB Coordinator for consultation if needed.

5. **You (or the Science Judge) may take the Team Challenge Question answer packets from your competition room to the Grading & Judges Appeals Room.**
   a) If you take the 1st TCQ to the Grading Room, return to your Competition Room. Alternatively, the Science Judge will take the TCQ to the Grading Room and remain there until grades are issued
   b) If you deliver the 2nd TCQ while the Science Judge remains in the Competition Room, you wait for the grades to be issued and return with them to the Competition Room, give them to the Science Judge.
   OR
   c) If the Science Judge is in the Grading Room, you deliver the 2nd TCQ and return to the Competition Room to help monitor the Half-time Break. The Science Judge will return with the grades.
6. **During the Half-time Break:**
   a) During the mid-round break (after 2\textsuperscript{nd} TCQ is completed), no members of the team are to leave the room. If there is an urgent need, the Rules Judge may assign an official to escort any team members (competitors, coach, alternate) that needs to leave the room, even to use the restroom.
   b) Any observers returning to the room, any new observers entering the room during the break MAY NOT speak with the members of the competing teams. Assist the Rules Judge in monitoring

7. **When each match is over, deliver the Match Competition Packet**, labeled with the Round # and Room #, immediately to Crab Pot Central. The packet should contain:
   - *Clipped to the Outside: Official paper scoresheet & Score transparency sheet*
   - *Inside: TCQ & answer transparencies, used TCQ and scratch paper sheets, any other competition papers*
   - **Any Warnings Issued? Inform CPC staff of any teams or individuals that have received warnings during your match.**
   - *Rejoin your Officials Team at your competition room.*

8. **Help breakdown/pack-up the Room supplies** after the last match in a competition room:
   - *Pack appropriate equipment & supplies to the Room Box & Buzzer case.*
   - *Return Room Box & Buzzer to Crab Pot Central.*

9. **Assist Crab Pot Central staff** with other duties and clean-up as needed.
The Team Challenge Questions have been reviewed by at least two individuals with subject expertise in an effort to eliminate erroneous or ambiguous questions. However, it is important for graders at each Regional Competition to review questions and recommend edits that are necessary for clarity and/or accuracy of the questions, as well as the acceptable answers. These edits are submitted to the RC, who collates and submits all TCQ edits to NOSB for consideration.

**Pre-Competition Question & Metrics Review**

*You will be provided with the bank of TCQs for your competition in advance of the actual event. It is important that you **review all the questions** before the competition and meet with the Regional Coordinator(s) and other TCQ graders to ensure question clarity and accuracy. Questions cover physical, chemical, geological & biological oceanography, as well as technology. They can include math, interpretation of graphs, recognition of marine life diversity or anatomy, short essay answers.*

*The Regional Coordinator(s) will collate all TCQ changes needed to fine-tune the questions and submit them to NOSB for consideration. NOSB will issue final versions in advance of the Bowl date.*

*The Coordinator(s) will share TCQ grader contact information and area of expertise with graders from both VIMS & ODU so that members of the grading team can communicate.*

*You are responsible for conferring with fellow TCQ graders at both institutions to review the grading metrics (answer & point assignment) provided by the question author. By mutual agreement, graders develop a quick, consistent and equitable grading plan for each question. You need to be able to evaluate partial work or methodology, in addition to the correct answer(s).*

*If you have questions or concerns, you contact the Regional Coordinator at your institution.*

**Competition Responsibilities**

1. **Your primary duty as a Blue Crab Bowl Team Challenge Question Grader** is to review and grade answers to the TCQs in your field as quickly, accurately and consistently as possible.

2. Graders work in seclusion, away from the competition rooms. The Regional Coordinators will attempt to provide the TCQ Grading Room with internet access, as well as diverse reference texts in the event that you need to cross reference question content or student answers for acceptability. You are encouraged to bring your favorite reference materials.

3. Graders work together to determine the most efficient strategy for grading questions as quickly, accurately and consistently as possible. There are 2 TCQs from per round, 2 teams in each match will write answers to both questions.
   - Some TCQ teams prefer to have topic specialists grade all questions in their field, e.g. biological oceanographers grade all biology-oriented TCQs, physical oceanographers grade physical science questions, etc.
   - In other cases, the grading metric may be so clear-cut that any/all graders can contribute to grading a question. The most important factor in grading will be accuracy and consistency.
   - When possible, the BCB Head Rules Judge will assist TCQ graders by coordinating the distribution of questions for grading as they are delivered by Match officials.
   - Number of questions to grade:
     - Rounds 1-5, there will be 16 answers for each TCQ x 2 TCQs = 32 answers to grade.
     - Beginning Round 6, teams are eliminated and there are fewer answers to grade.
4. For each competition match, TCQ graders complete a scoresheet (see below) that includes the individual and total TCQ scores for the two teams competing in that match. See example below.

**ONLY the scoresheet is returned to the competition room** with the room’s Science Judge or Room Runner. The teams’ TCQ answer sheets remain in the Grading room and are turned in to the RC at the end of the day.

5. The TCQ graders also assist if there are challenges to the scientific answers for toss-up questions.
   - If a challenge arises which is outside the fields of the officials in a competition
   - OR
   - if a student issues a 2nd challenge, the competition room’s Science Judge will come to the TCQ Grading/ Judges' Appeals Room to discuss the Challenge with specialists in the field, or to use reference books or internet access to corroborate an answer.

6. **TCQ Graders need to remain in the assigned grading room** throughout the competition so that they can always be located to resolve challenges.

   With permission from the Regional Coordinators and Head Rules Judge, they may observe Trophy Rounds. But, TCQ Graders must sit together so they are easily located and should exit the competition room quickly, returning to the grading room to grade TCQ questions or help resolve scientific challenges.

---

**Example**

**Team Challenge Questions**

**Scoresheet**

ROUND Number__________________________

ROOM Number/Name__________________________________________________________

<table>
<thead>
<tr>
<th>School:</th>
<th>School:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCQ-1</td>
<td>TCQ-1</td>
</tr>
<tr>
<td>TCQ-2</td>
<td>TCQ-2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>