Top of the Bench regional heats

2019/2020

Support and guidance for Local Section committees
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Top of the Bench

Top of the Bench is a national chemistry competition for students aged 14–16 to promote practical skills and teamwork in chemistry. The competition is one of our longest-standing school engagement activities: with the help of our members we have been organising and running this for more than 20 years.

The competition takes place in two parts during the academic year.

Regional heats
Regional heats are organised and funded by the Royal Society of Chemistry Local Sections. These run from October to January and the winning team from each heat progresses to a national final. The format of the regional heats varies across the regions, appropriate to each Local Section.

National final
The national final is organised by the RSC and held at a UK university in spring each year. Activities on the day include:
- an individual test of factual chemical knowledge
- a team practical exercise
- interactive lecture
- prize giving ceremony

There is also a session for teachers with one of our Education Coordinators exploring resources and ideas for the classroom. First prize is awarded to the best overall school performance, with five teams receiving runners up prizes. The Jacqui Clee Award is given to the student who has demonstrated an outstanding individual contribution to the day.

Examples of written and practical papers from previous national final are available to download from Learn Chemistry, please share these with any schools that you wish.
Top of the Bench rules – for organisers

1. Only schools located within the Local Section can enter the Local Section’s regional heat

2. The teams should have 4 students with the following composition:

| England and Wales      | Two students from Year 9
|                       | One student from Year 10
|                       | One student from Year 11
| Scotland               | One student from S2
|                       | Two students from S3
|                       | One student from S4
| Northern Ireland       | Two students from Year 10
|                       | One student from Year 11
|                       | One student from Year 12

3. Students must be in these school years for both the regional heat and the national final

4. The winning team from the regional competition should be the team that enters the national final

5. Teams should be broadly representative of their school’s gender balance

6. Students must not have taken part in previous TOTB competitions

7. For safeguarding reasons, students must be accompanied by their teacher(s). The teacher(s) must be present throughout the competition and they are responsible for the supervision and support of their students

8. Schools cannot be penalised if they prepare their students for the competition

9. Any suspicions of cheating must be discussed with RSC staff (education@rsc.org) before approaching/disqualifying the school

10. The correct answer is what is written on the mark scheme

11. The question master/competition organiser’s decision is final
Planning your regional heat

Date
Regional heats should be run between October and the end of January. The closing date for submitting school entries to education@rsc.org for the national final is the 31st January 2020.

Format
The exact format of the competitions varies across the regions. To ensure that the competition is a positive and equal experience for all students taking part we would recommend that Local Sections (where possible) organise a competition that has a similar format to the national final. We would therefore recommend a combination of a written paper/quiz/poster session and a practical element as the basis for a regional heat.

If the regional heat features a practical component, you will need to consider safety aspects – for example, will students need to bring their own lab coat or lab safety specs. Completing a risk assessment appropriate to the format of the regional heat is crucial prior to the competition. Please refer to the risk assessment section for further details.

Venue
A range of venues could be considered suitable for this event depending on the format of the competition. Examples include a local university, a science centre or a school laboratory. There may also be a local company willing to provide space to hold the competition. These venues can normally be hired at very low-cost or can even be negotiated to be free of charge.

Support for Local Sections
Planning and organising the regional heat should not be a laborious process. If you are struggling with volunteers, locating the ideal venue or need further financial support, we are here to support you.

Assistance in finding more volunteers
Organising and running a TOTB regional heat can be a considerable amount of work. Should you need more volunteers please contact education@rsc.org and we will be able to contact members of your Local Section to let them know of the opportunity to get involved.

Assistance in finding practical facilities
Should a Local Section decide to organise a practical element in their regional heat, we hope finding a suitable venue will not be a barrier. If you require help in finding practical facilities then please contact education@rsc.org and we will do what we can to assist.

Financial support
If a Local Section requires financial support to run their regional heat, they are welcome to apply to the Outreach Fund. This fund provides financial support to members, individuals and organisations in order to enable them to run chemistry-based public and schools engagement activities. Full details about funding categories, eligibility, criteria, restrictions and deadlines are available on the Outreach Fund website. As detailed in the restrictions, the Outreach Fund is not able to cover the cost of supply cover for teachers, teacher stipends or salaries or equipment to run a regional heat if the cost of the equipment forms the majority of the grant. Please note, the Outreach Fund is competitive and funding for a regional heat is not guaranteed. If you have any further questions about the Outreach Fund please contact education@rsc.org.

Promotion
Your regional heat should be advertised on your Local Section events page and your local Education Coordinator can promote your regional heat through their newsletters or local teacher events.
Resource bank
To help support our Local Sections, a shared regional heat resource bank of resources shared by Local Sections is available. This is secure and held on the RSC internal network to which only staff involved in the competition and our Education Coordinators have access. Should a Local Section require any ideas for their regional heat please contact education@rsc.org or your local Education Coordinator, and we will search the collection on your behalf, and provide by email the appropriate resource. Please be assured, to avoid any teachers or students being in possession of your resources, we will only take a request from a member who is involved in TOTB. If there is any doubt, the TOTB organiser will be contacted to confirm the request. We ask that the resource bank is not shared with any teachers or students. As a disclaimer, we will not be undertaking any quality assurance of the resources and when these are shared it will be made clear they are from the named Local Section and not created or moderated by staff.

Inclusion and Diversity
As representatives of the Royal Society of Chemistry, it is expected that Local Sections uphold our values of inclusion and diversity. Chemistry should be for everyone and we are committed to promoting and supporting inclusion and diversity across our education activities. It has been identified that a lack of diversity of the students taking part in the TOTB competition needs addressing, in particular the low number of state schools participating and the gender imbalance in the national final. Further details about our inclusion and diversity strategy as well as the report on ‘Diversity landscape of the chemical sciences’ give further details of the reasoning behind this initiative and how we plan to address the challenge.

We understand that the demographic of the winning school is not in our control, however we believe that through positive action a more diverse range of schools and students can be encouraged to take part in the regional heats, potentially resulting in a more balanced representation in the national final.

Gender
To address any gender imbalance we would recommend that Local Sections invite schools that are broadly representative of their school's gender balance

School type
To address the imbalance of school type in the competition we would recommend that Local Sections have a proportional representation based on the local school landscape and where necessary encourage more state schools to enter their regional heats.

Attracting a broader range of schools to enter your regional heat can be a challenge, especially if the same schools have historically always entered. The following barriers have been identified:

- Contacting state schools and getting interest from state schools may be addressed by sending personal invitations to local state schools with information about the event. A list of schools in your area can be found using the website www.schoolswebdirectory.co.uk. Your local Education Coordinator may be able to help with contact names or an introduction. It may also be possible for your Education Coordinator to help.

- Independent or grammar/ selective schools filling up places first may be addressed by having a phased invitation process where state schools have priority registration or you may wish to reserve places for state schools.

- Travel costs for schools to attend regional heats may be addressed by the Local Section applying to the Outreach Fund for financial support to cover travel expenses enabling more schools to attend (please note, the Outreach Fund is competitive and funding for a regional heat is not guaranteed). You may also wish to consider holding a remote regional heat by sending schools a postal or online quiz.

- Schools needing teaching cover to attend a regional heat may be addressed by considering delivering your regional heat in the evening or weekend (please note the Outreach Fund will not fund teacher cover). This will also avoid requiring permission to take students out of lessons.
Additional needs
A student’s additional needs should not be a barrier to participation in the competition and everyone should have the opportunity to take part. Local Sections are encouraged to communicate that their event is accessible to all and they can accommodate students with additional needs. Should you need advice on how to accommodate students with additional needs please contact education@rsc.org

Diversity monitoring
To ensure we are providing equality of opportunity and that the competition embraces inclusion and diversity, we would be grateful if you could complete and return the regional heats monitoring form in Appendix I (this is an excel spreadsheet that can be cut and pasted directly into an email) along with details of the winning school.

Health and Safety
Risk Assessment
Hazards and risk must be considered, assessed and managed for all events run on behalf of the Royal Society of Chemistry which includes TOTB competitions. Please see our risk assessment for events webpage for information regarding risk assessments and how to complete the appropriate documentation for your event.

Accident/incident procedure
Should an accident or incident occur at an event, it is important to inform the RSC as soon as possible. Please see our accident/incident procedure webpage for information and how to complete the appropriate documentation.

Safeguarding
It is important that there is proper supervision of students attending the event, to comply with safeguarding legislation. It must be made clear when inviting schools to take part in the competition (and any further communications) that students must be accompanied by their teacher(s). The teacher(s) must be present throughout the competition and they are responsible for the supervision and support of their students. At all times, volunteers must ensure they are not alone with any students. The RSC’s safeguarding policy, safeguarding procedures and processes and safeguarding incident form will soon be available on our website.

If you have any questions regarding safeguarding, please contact the Designated Safeguarding Officers, safeguarding@rsc.org.

GDPR
Local sections can use an existing list of email addresses to contact schools about their Top of the Bench competition. It is also possible for you to store contact details to invite schools to future Top of the Bench competitions. You will need to include the sentence below in your communications to ensure the schools understand how they can be removed from your mailing list:

*The Royal Society of Chemistry will contact you regarding future Top of the Bench competitions. None of the data we maintain for Top of the Bench will be used for marketing purposes or shared with third parties. If you prefer not to hear about future competitions please let us know by contacting [EMAIL ADDRESS]*
Running an inclusive TOTB competition checklist

Organising committee
• Use a diverse team of individuals for the organisation of an event in order to provide balanced views and reduce the risk of any unconscious bias

Venue
• Ensure the venue has appropriate access requirements for all (eg wheelchair, crutches, hearing difficulties)
• Ensure that microphones are available and used if required
• Consider use of a sign-language interpreter or visualising speech if required
• Provide inclusive catering (considering dietary requirements, religious observances) if appropriate

Invitation and Registration
• Make sure all Top of the Bench marketing materials represent the diversity of our community, thinking about language and imagery used and being careful not to perpetuate any negative stereotypes (such as the competition is only for certain schools or students)
• Consider advertisement of the event – have all schools been included?
• Provide information on accessibility services offered
• Request information any additional needs/accessibility needs or if large text resources are required
• Use an open text box for dietary requirements (collect dietary and access requirements separately)

Participants
• Collect diversity monitoring data and send to education@rsc.org

A more detailed guide to running an inclusive event can be found on the RSC website
## Timeline and key dates

The regional heats run between October - January

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Activity Details</th>
</tr>
</thead>
</table>
| Three months in advance       | - Plan a date and book a venue  
- Invite local schools to enter a team  
- Registration process         |
| One month in advance          | - Complete a risk assessment (and submit declaration if appropriate to the RSC no later than 2 weeks before)                                       |
| Two weeks before              | - Final details to be sent to schools including:  
  - Date, time, venue  
  - Map and directions to the venue  
  - Format of regional heat (quiz or practical)  
  - Contact details of event organiser for any queries |
| On the day                    | - Familiarise yourself with the venue and fire procedures  
- Ensure all students are accompanied by a teacher and are signed off on an attendance record  
- The event should begin with a short welcome talk from the event organiser including details of the fire procedure. The event organiser should also explain the format of the competition as well as answering any queries before the heat starts.  
- The winners of the regional heat should be announced at the end of the event.  
  - Please inform the winning team that you will submit the teams entry to the RSC for the national final and the RSC will be in touch the first week of February 2020 with further details. If the school has any questions please ask them to email education@rsc.org |
| Following the event and no later than 31st January 2020 | TOTB organiser/Local section to submit the form in Appendix I to education@rsc.org. This information includes:  
- Winning school name  
- Teacher name and email address  
- Date and format of your regional heat  
- Diversity monitoring information of schools that entered |
| Early February 2020 (or before if school details have been provided) | - The RSC will contact all schools providing details of the national final and how to register |

Local Sections that miss this deadline may forfeit their winning team entering the national final.
Appendix I: Top of the Bench regional heats form (please return to education@rsc.org)

Local Section:

Date of competition:

Format of Competition:

Winning School: Winning School Contact and email:

<table>
<thead>
<tr>
<th>School name</th>
<th>Postcode</th>
<th>Has the school entered before? (Y/N)</th>
<th>Gender of team (Male/Female/Other)</th>
<th>Any additional needs/accessibility needs?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Student 1</td>
<td>Student 2</td>
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Appendix II: Example Documents

The following documents can be used as templates when organising your event:

- Example invitation
- Example entry form
- Example joining instructions
Example invitation

Royal Society of Chemistry Top of the Bench competition

The [local section] will be holding a regional heat for the Royal Society of Chemistry Top of the Bench competition. This competition is open to all schools and we would like to invite you to nominate a team of four students to take part.

The regional heat will take place on [day, date] from [time] at [venue name and address]. The winners of the regional heat will progress to a national final held in [location] on [insert date].

The Royal Society of Chemistry is committed to inclusion and diversity. Our Top of the Bench competition is accessible to all and we can accommodate students with additional needs. [insert accessibility services the venue/competition can offer].

Top of the Bench rules for schools

1. Only schools from the Local Section can enter the Local Section’s regional heat

2. The teams should have 4 students with the following composition:

<table>
<thead>
<tr>
<th>England and Wales</th>
<th>Two students from Year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One student from Year 10</td>
</tr>
<tr>
<td></td>
<td>One student from Year 11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scotland</th>
<th>One student from S2</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Two students from S3</td>
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<tr>
<td></td>
<td>One student from S4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Northern Ireland</th>
<th>Two students from Year 10</th>
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<td></td>
<td>One student from Year 11</td>
</tr>
<tr>
<td></td>
<td>One student from Year 12</td>
</tr>
</tbody>
</table>

3. Students must be in these school years for both the regional heat and the final

4. The winning team from the regional competition should be the team that enters the National Final

5. Teams should be broadly representative of their school's gender balance

6. Students must not have taken part in previous TOTB competitions

7. For safeguarding reasons, students must be accompanied by their teacher(s). The teacher(s) must be present throughout the competition and they are responsible for the supervision and support of their students
What will happen at the regional heat?

[brief details of format of competition – quiz or practical test]

The winners will be announced in a short awards ceremony at the end of the event.

You can nominate a team by completing the enclosed entry form and returning it to [address of event organiser] or [email address of event organiser] by [deadline].

If you have any questions, feel free to get in touch. We look forward to seeing you there!

Yours sincerely,

[Local Section Secretary Name]

RSC Local Section Secretary
Example entry form

Royal Society of Chemistry Top of the Bench competition

School entry form

[Local Section name]

Name of school:

Name of teacher(s) accompanying team:

Team:

<table>
<thead>
<tr>
<th>Student name</th>
<th>Gender</th>
<th>School year</th>
<th>Any additional needs/accessibility needs or large text resources required?</th>
<th>Dietary requirements? (Delete if not applicable)</th>
</tr>
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<tbody>
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<td>1.</td>
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<td>4.</td>
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</tbody>
</table>

School address:

School phone no:

Contact email:

Has your school taken part in this competition before?       Yes/No
Thank you for entering a team in the upcoming Top of the Bench regional heat. We hope that your students will enjoy the competition.

Event details

Date:

Time:
(Please arrive in plenty of time)

Venue:

[Provide directions and map and include accessibility information]

Format of competition:

[Be sure to include details of anything the teams need to know or may need to bring with them eg a calculator]

Please note, for safeguarding reasons, students must be accompanied by their teacher(s). The teacher(s) must be present throughout the competition and they are responsible for the supervision and support of their students

If you have any questions please do not hesitate to contact me.

I look forward to seeing you on the day.

[Local Section contact]

[Contact telephone number/email]