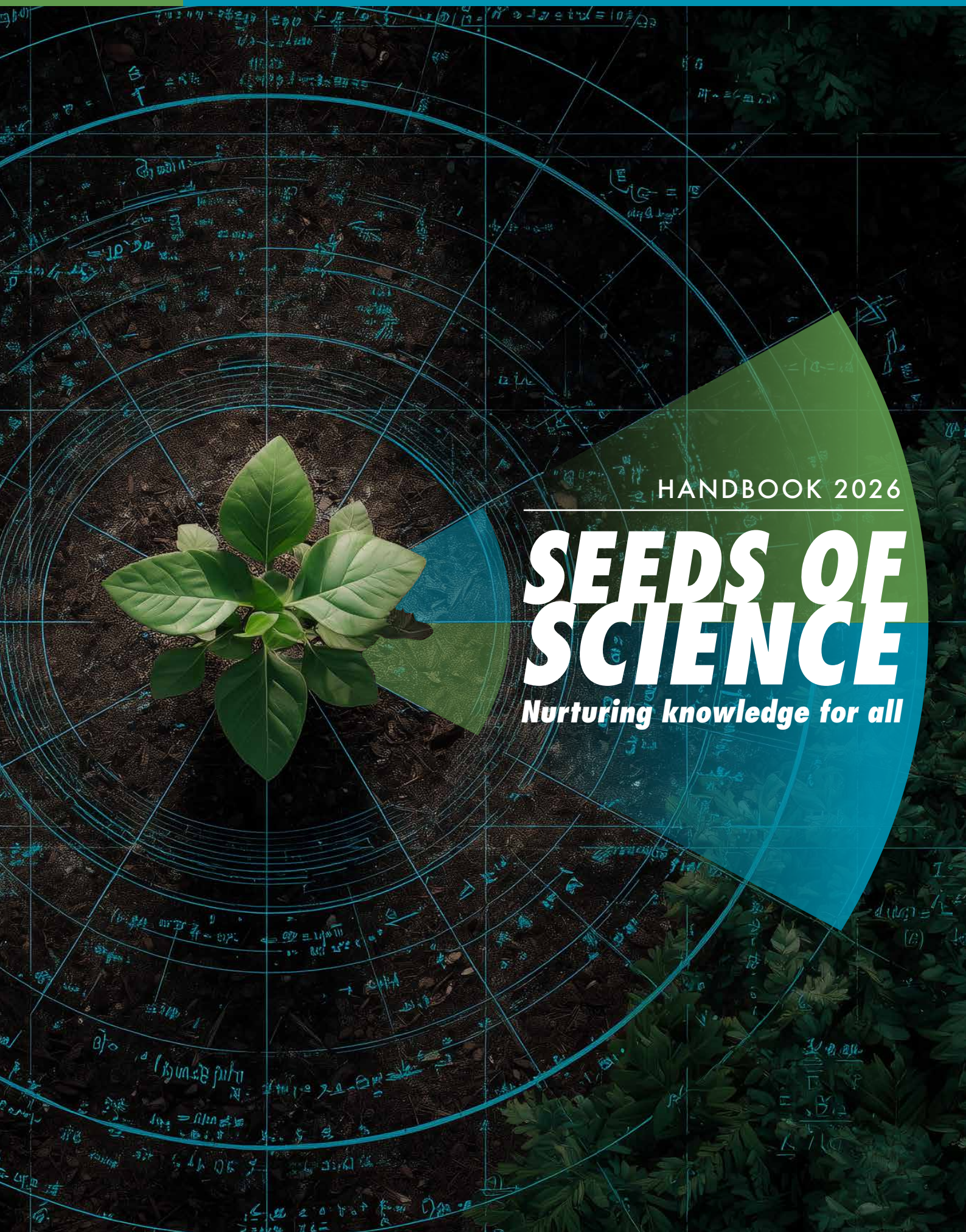
75TH SCIENCE TALENT SEARCH



HANDBOOK 2026

SEEDS OF SCIENCE

Nurturing knowledge for all

SCIENCE TALENT SEARCH COMMITTEE 2026

The Science Talent Search (STS) Committee consists of volunteer members of the Science Teachers Association of Victoria Inc. (STAV) and other interested persons who volunteer their time and expertise to organise the judging and exhibition of entries.

There are currently vacancies on the STS Committee, and we welcome expressions of interest from educators and professionals who are passionate about fostering scientific inquiry and student engagement. Contact us for more information at sts@stav.vic.edu.au.

STS Management

Alexandra Abela	STAV president
Diana Amato	STAV Executive Director
Farah Deeba	Al-Taqwa College
Janice Teng	Science Educator
Josie Crisara	Aitken College
Leonie Lang	Science Educator
Loretta Agius	STAV Events & Projects

STS Assistants

Catie Hocking	STAV Marketing
Charmaine Pienaar	STAV Accounts
Jirana Craven	STAV Events & Projects
Loretta Agius	STAV Events & Projects
Rosalie Maxted	STAV Administration

STS Committee 2026

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Ann Pisarevsky	Science Educator
Catherine Bellair	Thomas Carr College
Cindy Han	Swinburne University
Dilan Abeyaratne	Brunswick Secondary College
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Jason Smith	Assumption College
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Kylee Townsend	Hazel Glen College
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Lynden Fielding	Preshil College
Marisa Jarvis	Hume Anglican Grammar
Mehar Saeed	Minaret College
Maureen Frith	Science Educator
Michaela Patel	Caulfield South Primary School
Nicola Dziadkiewicz	Australian Academy of Science
Raquella Neiger	Science Educator
Rebecca Hann	Berwick College
Rosina Tassone	Ave Maria College
Sarah Shatford	Hume Anglican Grammar
Veena Nair	Viewbank College

Contact Us

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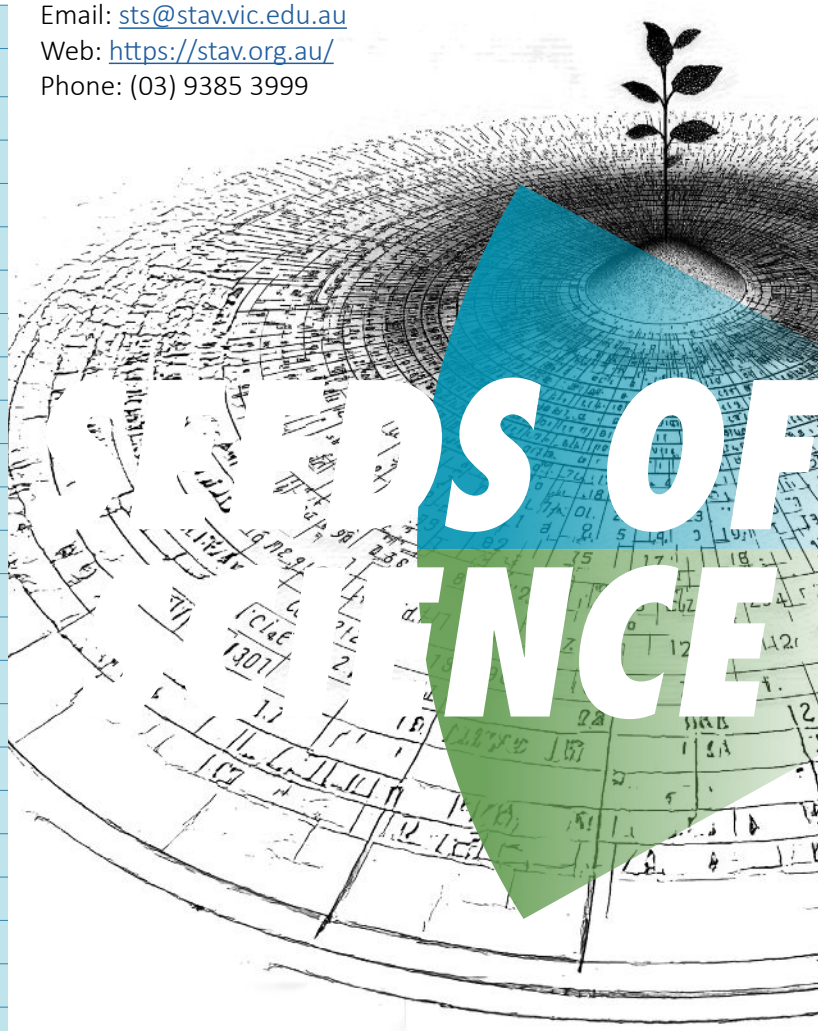

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A digital copy of the 2026 STS Handbook will be electronically distributed to all STAV members and subscriber schools.

This handbook is subject to change, please refer to the STS website for the latest version.

Copyright Release

The STS Committee reserves the right to publish any material as it sees fit in order to further the aims of STS, including publishing on the web (without identifying authors and schools together). Such publication shall not be for commercial purpose. Permission must be obtained from the STS Committee before any other organisation may publish any of the said material. The Committee reserves the right to retain selected entries to use for public display to further the aims of STS.

ABOUT THE SCIENCE TALENT SEARCH

The Science Talent Search (STS) is a familiar concept to primary and secondary science teachers in Victoria.

STS was founded in 1952, making it one of the longest running programs of its type in the world!

STS Has Three Broad Aims:

1. To stimulate an ongoing interest in the study of sciences by:
   - » Encouraging independent self-motivated project work amongst students of science;
   - » Giving students the opportunity to communicate their achievements to a wider audience;
   - » According recognition of effort and achievement in a scientific enterprise.
2. To promote the direct involvement of students in the processes of science and its communication.
3. To give the public at large an opportunity to see the quality of work being achieved in science, by both primary and secondary students.

Why STS?

We believe that science teachers have a professional responsibility to encourage students to develop a broader understanding and application of science and technology which is fundamental to sound social and personal judgement, now and in the future.

Science Talent Search is for everybody: for those planning a career in one of the sciences or technological disciplines, for those interested in scientific hobbies, or for those concerned enough to present a point of view about science through the medium of computer program, essay, game, photography, poster, video, model or an invention.

The substantial participation in STS indicates that a significant number of teachers are making provision for students of widely differing interests and abilities to pursue scientific activities of interest to them.

We believe that personal expression of interest and concern through independently executed, open project work is an essential ingredient in the appreciation and understanding of science.

We believe that through STS we are developing in students, skills and attitudes which will contribute to the well-being and development of the wider community in which they will live and work.

The Science Talent Search would like to acknowledge and pay respect to the First Nations Peoples, who are the traditional custodians of the lands and waters on which we are each located. We recognise and celebrate their ongoing connection to culture and Country. We respectfully acknowledge all Elders, past, present, and emerging, as we continue to walk together towards a connected Country.

ENTRY INFORMATION

Entry Fees (Incl. GST)	
Individual	$12.00 per entry
Group (maximum 2 students)	$20.00 per entry
Class Project (Primary only)	$35.00 per entry

DATES

Important Dates 2026

Date	Day	Details
3 March	Monday	Entry Registrations – Open online via School Portal.
25 May	Sunday	Entry Registrations – Close.
9 June	Monday	Schools Pack 1 – Official registration documents distributed via email and the School Portal.
12 June	Friday	Online Entry Submissions – Open via online School Portal.
27 July	Monday	Online Entry Submissions – Close. Late entries will not be accepted.
1 - 16 August	2 Weeks	Judging of Online Sections – Underway.
20 August	Wednesday	Schools Pack 2 – Entries received via School Portal.
7 October	Monday	Schools Pack 3 – Results and certificates distributed.
10 November	Tuesday	Website Launch - Virtual Showcase.

Please note, that there will not be an in-person judging day this year.
ALL judging will be conducted via the online portal

PROJECT DIVISIONS & SECTIONS

Year Level Divisions

Divisions	Code	Year Level
Lower Primary	L	Foundation to Year 2
Middle Primary	M	Year 3 & 4
Upper Primary	P	Year 5 & 6
Junior	J	Year 7 & 8
Intermediate	I	Year 9 & 10
Open	O	Year 11 & 12

Section Categories

Sections	Code
Computer Programs	C
Creative Writing	W
Experimental Research	R
Experimental Research – Class Project	S
Games	G
Inventions	I
Science Photography	F
Scientific Posters	P
Video Productions	V
Working Models	M

STS SCHOOL COORDINATOR RESPONSIBILITIES TIMELINE

Each school participating in the STS is required to appoint an STS School Coordinator. This individual will serve as the primary contact for all STS-related correspondence and will be responsible for the following:

February – May

- Publicise the STS competition within the school.
- Ensure students and parents receive all relevant information about the appropriate competition sections.

February – October

- Serve as a point of contact for staff and students, answering any questions about the STS competition.

March – May

- Enter all registration details correctly and fully on the STS School Portal by the due date.
- Before registering students, confirm that they and their teachers are aware of the specific guidelines for their chosen section, as failure to follow these guidelines may disadvantage students.
- Use the Pre-Submission Checklist for STS Entries to ensure all preparations and verifications are completed accurately.

May

- Review entry data on the STS School Portal.
- Registrations close- ensure all entries are submitted.

June

- Distribute Schools Pack 1, which includes official Entry Face Sheets for student projects.
- Generate your schools invoice - via https://stav.org.au/sts-entries/

July

- Ensure payment of entry fees;
- Collect and submit electronic copies of student work via the STS School Portal. Each submission must include a separately submitted Entry Face Sheet. Text documents must be in .pdf format. All files need to be uploaded into the portal.
- Computer programs must be hosted by students online and be directly accessible without a password.
- Ensure that students do not send their entries individually to STAV.
- Ensure judges can access the Judging Portal prior to judging commencing.

August

- Ensure Judges from your school are aware of their judging commitments.
- Due to the organisation and distribution of judges over the entire competition, judges are still required even if some or all of your entries are subsequently not submitted. Please be aware that some sections require a higher judge to entry ratio and without our volunteer judges this competition would not be able to continue.

August – September

- Check Schools Pack 2. This is your last chance to update any project details with STS staff in preparation for the bursaries.

October – November

- Receive and distribute Schools Pack 3 (Bursary Results and Virtual Showcase).

Pre-Submission Checklist for STS Entries

- ☐ Reviewed the STS School Coordinators' Role Timeline & General Information (pp. 6-8).
- ☐ Reviewed Student Checklist (p. 9).
- ☐ Included volunteer judges' details in the submission.
- ☐ Verified the spelling of student names.
- ☐ Ensured the total number of entries was either 5% of total student enrollment per campus or 25 entries, whichever was greater.
- ☐ Limited class project entries to a maximum of 8 per school.
- ☐ Confirmed that students were informed about the current guidelines and presentation requirements for the sections they entered. Check page 36.
- ☐ Advised students to keep a copy of their entry (STS takes no responsibility for lost entries).
- ☐ Entered judges' details online.

Important Note

- Please note that the entrant's ID code is unique and not transferable. Names cannot be substituted once online registrations close.

GENERAL INFORMATION FOR SCHOOLS AND TEACHERS

1. Maximum Number of Entries Per School Campus: Primary (F-6), Secondary (7-12)

- Enrollment counts only include students within the specified ranges: F-6 for Primary and 7-12 for Secondary.
- Each school campus (i.e., F-6 or 7-12) is restricted to a maximum number of entries equal to 5% of the student enrollment at that campus OR 25 entries, whichever is the greater.
- Class Projects (Experimental Research ONLY): Maximum of 8 entries per school, with up to 35 students per project.
- For STS purposes a campus is a separate location with students permanently enrolled at that location and administered by a campus Principal.
- Primary and Secondary components at the one location are regarded as separate campuses. Separate entry details must be completed for primary and secondary entries.

2. Open Division (Year 11 and 12)

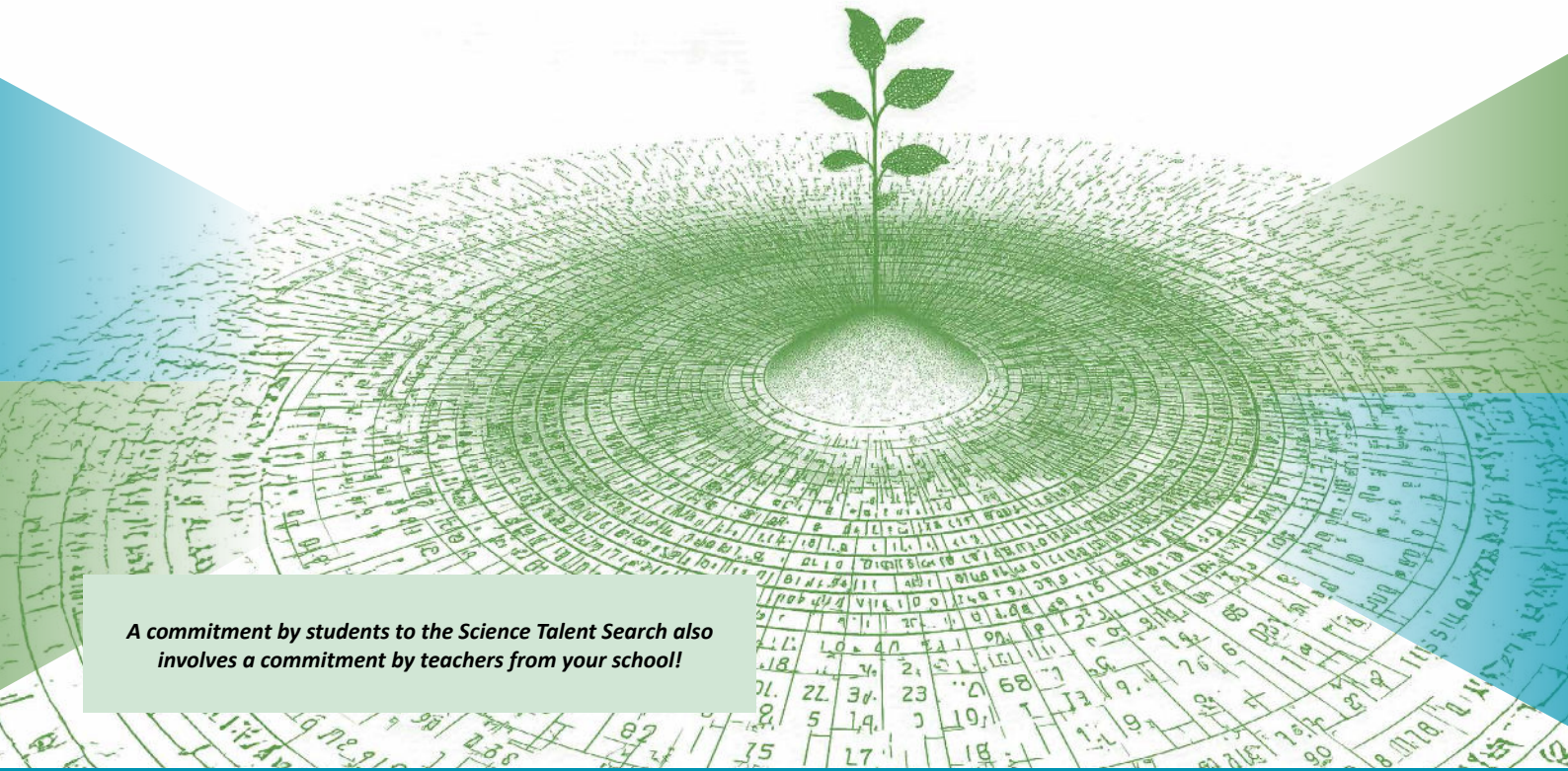
- STS encourages senior students to pursue their scientific passions by offering them the opportunity to develop their personal interests, as long as they adhere to the competition's guidelines.
- We hope teachers will encourage only those students who can effectively balance VCE commitments with personal project work.

3. Individual and Group Entries

- Entries can be either individual or group projects.
- Group projects consist of exactly two (2) students.
- Class Projects (Experimental Research ONLY) can include up to 35 students.

4. Schools' Responsibilities for Judging Entries

- **Judge Provision:** Each participating school must provide one judge for every twelve entries (or part thereof). This requirement applies even if a school has only one entry.
- **Judging Commitments:**
  - » All judging will be conducted online between 1st- 16th August. **There will be no in person judging day this year.**
  - » Judges will be sent out judging guide notes, and access to the judging portal by July 30th.
  - » Each judge (regardless of the number of school's entries) are typically assigned approximately 8-10 entries for judging.
- **Judge Replacement:** If a judge becomes unavailable, it is the school's responsibility to find a replacement to fulfill the judging obligation. Remember this competition is run by volunteers.



A commitment by students to the Science Talent Search also involves a commitment by teachers from your school!

GENERAL INFORMATION (CONTINUED)

5. How to Enter Your Students

Registration Process:

- **Activate your school's account:** First, register your school for the current year using the online School Portal. The STS School Portal will go live on 3rd March 2026 at 9:00 AM and the registration function will close on 25th May 2026.
- **Download student and judge proformas** from the Science Talent Search website to help collect full details. https://stav.org.au/sts-resources/
- **Gather necessary information before starting:**
  - ☐ School STS coordinator details (including a correct email address).
  - ☐ School campus (F-6 or 7-12) enrollment numbers.
  - ☐ School account contact details.
  - ☐ List of volunteer judges (one judge per 12 entries or part thereof), including their three preferences for judging sections and VIT/WWCC details.
  - ☐ Full STS student entry details.

Steps to Register:

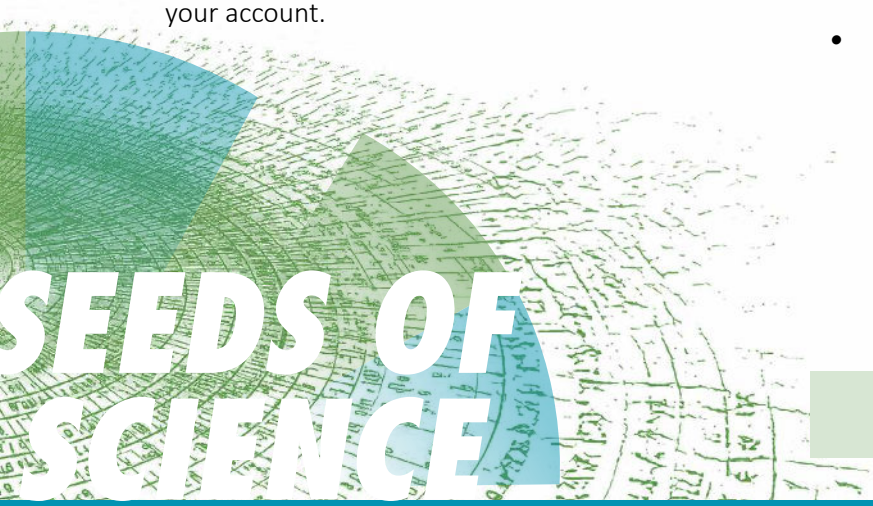
1. Visit the STS School Portal on the STS website.
2. Click on the 'Register here' link.
3. Use the search function to locate your school, ensuring the correct campus is selected. Primary and secondary must register as separate campuses.
4. If your school isn't listed, contact STAV via email at sts@stav.vic.edu.au.
5. Enter the STS coordinator's email address accurately. Create a password, log in, and record your password for future reference. You must set up a password even if you have previously activated the account since data is cleared for the new competition year.
6. Upon logging in, an email will be sent to activate your account.

After Receiving Confirmation Email:

8. Log in with your email address and password to access and edit your school's records.
9. Check and update your school details. Choose the 'Update School Details' link and ensure to click 'Update Details' after making changes.
10. Enter details for your first judge and then enter project details. After every 12 projects, add another judge.
11. Check spelling and entry details carefully; changes cannot be made after registration closes.
12. Click both 'Add Student' and 'Submit' to save your information.
13. Download the entry summary from the school portal.
14. You may add, edit, or remove entries until the closing date, 25 May 2026. For more detailed instructions visit the STS website.

6. Payment

- Confirm your school's accounts contact.
- If paying by invoice, arrange a purchase order. **This must be done PRIOR to generating the invoice.**
- Visit the STS payment page: stav.org.au/sts-entries
- Choose the entry types that match your quote - *quantities can be adjusted in the Cart.*
- Go to the Cart (adjust quantities if necessary) and Proceed to checkout.
- Check over the quantities - insert Billing details (invoices will be sent to this email).
- **IMPORTANT**- Insert the School Name and Entry ID numbers in the Additional Information field
- If paying by credit card, insert payment details and place order.
- If paying by Purchase Order, select Pay On Invoice, fill in the details and Place Order.
- *Payments must cover ALL entries from the close of registrations and any subsequent late administration fees.*



STS website: stav.org.au/science-talent-search

STUDENT CHECKLIST FOR ENTERING THE SCIENCE TALENT SEARCH

The Science Teachers Association of Victoria Inc. invites all students to enter this year's Science Talent Search. You may enter as an individual or as part of a group of two (2). You may enter into one or more of the sections described in this book.

Getting Started

☐ **Read the Handbook:** Familiarise yourself with the section guidelines to ensure your entry meets all requirements. Entries not adhering to these guidelines will be disadvantaged.

Entry Process

☐ **Obtain Entry Form:**

- » Get an STS student entry proforma from your science teacher or download it from the STAV website.

☐ **Complete and Submit Entry Form:**

- » Fill out the entry proforma thoroughly.
- » Return the completed form ONLY to your Science Teacher.

- Your school STS Coordinator will handle the online submission.
- Your school STS Coordinator will receive acknowledgement of your entry from STAV, which will include Official STS Entry Face Sheets and general information.

Entry Fees

☐ **Confirm and Pay Entry Fees:**

- » Refer to page 4 of the Handbook for entry fee information.
- » Confirm the amount with your school STS Coordinator and inquire about the accepted payment method.
- » Ensure that fees are paid on time as per the guidelines provided by your school.

Project Submission

☐ **Prepare Your Project:**

- » Prepare an electronic copy of your project for online submission.
- » Name your file correctly! See page 35.
- » All video content must be submitted in .mp4 format.
- » All text content must be submitted in .pdf format. This ensures that judges can view your project without any issues.
- » Make sure to adhere to the specific project requirements for electronic submission as outlined in the project section of this Handbook. Check for any file format, size, or content restrictions. Check page 36.
- » Ensure you have included Bibliography and Acknowledgements. See page 34 for referencing guidelines.
- » Note that the word count specified for each project does not include the Bibliography, Acknowledgements, Appendix, or any other attachments e.g., logbook.
- » Ask your teacher or parent(s) to check your report to make sure it follows the guidelines.

☐ **Sign and Attach the Entry Face Sheet:**

- » Provide a signed Entry Face Sheet, which your teacher will submit electronically with your project. (Entry Face Sheets are sent to schools after entries are registered).

☐ **Backup Your Work:**

- » Create a full electronic copy of your work, including scans of log book, etc.

☐ **Submit Through Your Teacher:**

- » All entries must be submitted electronically; your teacher will handle this submission. Hand your electronic copy to your teacher and ensure they have everything needed for the submission well before the due date.

No responsibility is taken for lost or damaged equipment.
Please ensure you keep your property secure.
Judges decisions are final. No correspondence will be entered into.

AWARDS

All students who enter the Science Talent Search are eligible for awards. Schools also become eligible for special awards.

Student Awards

Bursaries

Every year individuals and groups are awarded bursaries totalling tens of thousands of dollars, thanks to the generous sponsors of STS. Major and Minor bursaries are awarded in all sections.

Medallions are also presented to bursary winners and sent to schools.

Bursary awards are made out to individual entrants. In the case of a group award, the value will be halved and made out to each member of the group.

Certificates

A Bursary Certificate is printed for each student gaining a Major or Minor award, for an outstanding and exceptional project.

A Distinction Certificate is issued to entrants whose projects met all of the criteria and were of a very high standard and quality that deserves special commendation.

A Merit Certificate is issued to entrants whose projects were of good to very good standard and deserve recognition for their work.

Those entrants who don't receive a prize-winning Bursary, Distinction or a Merit Certificate, receive a Certificate of Acknowledgement.

New Award Announcement

In case you missed it, at the end of 2025 we launched the new Dr. Robert Roe Volunteer Service Award, in appreciation for all the hard work Coordinators, Teachers, Judges and volunteers contribute to the Science Talent Search and the pursuit of Science.

School Awards

Schools with a very high standard of entries across all the sections are nominated by the STS Management for special awards.

The Peter Craig School Awards 2025

- St Monica's Primary School
- Fintona Girls School- Senior Secondary
- Balnarring Primary School
- Viewbank College

The Hugh McKnight Encouragement Awards 2025

- Fitra Community School
- Presbyterian Ladies' College- Senior School
- Solway Primary School
- Gleneagles Secondary College

Dr. Robert Roe Volunteer Service Award 2025

- Jessie Evans - Solway Primary School/ Home School
- Caitlin Ingham - Lab Rats Science Club (Primary & Secondary)

Discover How the Science Talent Search Integrates with the Victorian Curriculum

The Science Talent Search fits ideally into the Victorian Curriculum philosophy of teaching and learning, encouraging creative, self-motivated project work through open-ended, multi-disciplinary projects. The competition requirements integrate well with many of the Victorian Curriculum strands and substrands and closely align with numerous achievement standards for Science and other learning areas, as well as the Capabilities Curriculum.

For more information about using the Science Talent Search as an integral part of your Victorian Curriculum implementation, contact the Science Talent Search office at 9385 3999 or visit: stav.org.au/science-talent-search.

HOW TO GET STARTED

For Teachers: Engaging Classes in the Science Talent Search

- **Organise a Preliminary Competition:** Run a school science competition to stimulate interest, ideally completing this before the end of Term 1.
- **Network with Other Schools:** Contact STS Coordinators at other schools for insights on student organisation.
- **Integrate STS Projects into the Curriculum:** Incorporate STS projects into your primary, junior, and intermediate science programs.
- **Review Past Projects:** Examine previous years' projects to provide examples and inspiration (e.g., from students' previous work in STS or view the online Awards Showcase).
- **Foster Discussion and Ideas:** Pose questions to the class about structuring projects and suggest extending class tasks as potential STS projects.
- **Demonstrate and Suggest:** Use demonstrations to inspire project ideas, suggesting how techniques might be applied to explore interesting topics.
- **Support and Guide:** Offer your help to students, outline competition criteria, and provide copies of the Section Information.
- **Professional Development:** Attend STS-related sessions at STAV conferences, events and workshops.

For Students: Developing Your STS Project

- **Choose a Meaningful Topic:** Select a project topic that interests you, whether it's something observed in class, at home, or outside. Discuss your ideas with you teacher(s), parent(s), peer(s).
- **Add a Personal Touch:** If you adopt an idea from another source, try to add an original angle to it. Remember, your own ideas are usually the best.
- **Acknowledge Assistance:** If you receive help with any parts of your project, be sure to acknowledge it. However, ensure that the content and ideas are your own. For example, younger students (Lower Primary) may have someone type their work, but this must be a word for word transcription from their own handwriting or verbal description, and must be properly acknowledged in the 'Acknowledgements' section.

Additional Resources and References

- **Visit the STS website:** For more resources , sources of ideas and other information, visit stav.org.au/science-talent-search.
- **Note:** Our links to other websites don't mean we've checked or approve of everything on those sites.

HOW TO GET STARTED

USE OF AI POLICY

Guidance for Responsible and Ethical Use of Artificial Intelligence Tools

What is Allowed

Unless otherwise stated in the section guide of this Handbook:

AI as a Tool, Not a Creator: Students may use AI tools (e.g. ChatGPT, image generators, coding assistants) to support their learning or process – such as idea generation, planning, or summarising background information, unless otherwise stated in the section guide of the STS Handbook.

Data Analysis & Visualisation: Use of AI-assisted data analysis, graphing tools, or modelling is permitted as long as students understand and can explain the output.

Proofreading or Editing: Grammar and spelling tools may be used to refine presentation but should not rewrite or generate significant original content.

What is Not Allowed

AI-Generated Work as Student Work: Entire sections (e.g. reports, scripts, code, artworks, models) generated primarily by AI must not be submitted as original student work.

No Attribution: Students must acknowledge any use of AI tools. Failing to cite AI tools in the Bibliography is considered a breach of STS guidelines.

Best Practices for AI Use in STS

Transparency: All use of AI tools must be cited in the Bibliography, alongside other references.

Understanding is Essential: Students must be able to explain their work, especially if AI tools were used to support the process.

Original Thinking: Creativity, critical thinking and student voice must remain central. AI should not replace a student's own contribution.

AI Disclosure for Bibliography

Include your use of AI, alongside other references, formatting in line with your bibliography style:

Format:

- Name of AI Tool used
- Where it was used.
- Command prompts used.
- Acknowledgement of review.
- Date and time you accessed the tools.

Example: Chat GPT was used to [eg. brainstorm project ideas / summarise research / assist with editing] using the following commands [insert commands]. All content has been reviewed and adapted to relfect my/our own understanding and orginal work. Accessed January 6, 2022, 6:08 PM.

COMPUTER PROGRAMS – GAMES AND SIMULATIONS

ALL DIVISIONS

Create a Computer Program to Communicate Your Chosen Science Topic!

Your program can be a game, a simulation, or both, but it must be interactive and actively engage users rather than merely presenting information. While you are encouraged to follow this year's theme, 'Decoding the Universe', exploring a scientific topic of your own choice is also welcome.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ The computer program is written in a general-purpose programming language (e.g., Scratch, Python, JavaScript, C#).
- ☐ The program should provide a full user experience within 5 minutes, though it may run longer.
- ☐ You must host the game online and provide a functional URL link, that does not require the use of any password.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Written Report (500-1000 words):**
   - ☐ **Cover Page**
     - » Title.
     - » Science Topic.
     - » Web link to your program.
     - » Programming language used.
     - » Operating system used.
     - » Instructions on how to run the program.
   - ☐ **Main Body**
     - » About My Program: Describe your program.
     - » User's Journey: Describe the user's journey from start to finish.
     - » Scientific Content: Describe the scientific content, how the program integrates this science.
   - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
   - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.
2. **Oral Presentation Video:** Along with your computer program submit an Oral Presentation Video. Your video must be 5-8 minutes long and should be submitted in .mp4 format. This video should be broken into two parts:
   - ☐ **Part One (2-3 minutes): Oral Presentation of Your Project.**
     - » State the aim and purpose of your program. Remember to mention who it's intended for (the age range or audience).
     - » Summarise the scientific ideas and content included in your program.
     - » Explain the development process: How did you program or create your project? Mention the programming language you used.
   - ☐ **Part Two (3-5 minutes): Program Walkthrough.**
     - » Show a close-up of your computer screen as you demonstrate how your program works.
     - » Talk through what you're doing so the judges understand each step of your demonstration.

Judging Criteria

- Ensure you discuss both the science and the programming aspects of your entry.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Computer Programs should be accessible via a URL that does not require a password.

CREATIVE WRITING – PICTURE STORY BOOKS

LOWER AND MIDDLE PRIMARY DIVISIONS

This years' theme celebrates how curiosity, ideas and evidence are planted, grown and shared, empowering everyone to explore scientific concepts creatively.

Your creative writing entry must relate to one of the four specified topics. Each piece should integrate scientific concepts creatively and accurately.

2026 Topics

1. The Magical Microscope
2. The Inventor's Treehouse
3. Growing Ideas
4. The Spark Beneath the Surface

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Choose Your Topic:** Your picture story book must focus on one of the specified topics. Clearly print your chosen topic on your Entry Face Sheet and Story Book.
- ☐ **Format Variety:** Your entry should be a fictional story depicted through imaginative narratives like detective, horror, drama, biography and more.
- ☐ **Script Format and Presentation:** Typed or printed scripts are preferred for legibility, but neat handwriting is also acceptable. Remember, the presentation is crucial- entries should be visually appealing and tidy. Poor presentation will negatively impact your score.
- ☐ **Grammar and Spelling:** Attention to grammar and spelling is critical. Proofread your work carefully to ensure accuracy.
- ☐ **Scientific Integration:** Incorporate factual scientific information into your pictures and words. Your story should convey science concepts through pictures supported by minimal text.
- ☐ **Explanation of Key Science Ideas:** Include an appendix listing at least 5 key science ideas used in developing your picture story book, with a brief explanation for each. Entries lacking scientific content integrated into the story and illustrations will not rate highly.
- ☐ **Illustrations:** Any illustrations must be original and hand-drawn- any art medium is allowed. Digital AI generated illustrations will not be accepted.
- ☐ **Word Count:** For Lower Primary (Foundation – Year 2), entries can be up to 200 words. Middle Primary (Year 3 – Year 4) entries must be between 100 and 300 words. Include a word count at the end of your book, applicable only to the story.
- ☐ **Bibliography**: Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

Judging Criteria

Your entry will be judged according to the following criteria:

1. **Scientific Content:**
   - Appropriate amount of scientific content.
   - Integration of science ideas.
   - Identification of basic scientific ideas.
   - Accuracy of scientific ideas.
   - Appendix of key science ideas, each explained in 2-3 sentences (see STS website for examples).
2. **Expression and Presentation:**
   - Grammar and spelling.
   - Clarity of expression.
   - Use of own words and pictures.
   - Development of story line.
   - Originality and creativity.
3. **Format:**
   - Interest of the story beginning.
   - Interest and entertainment in the pictures and story.
   - Quality of the ending.
   - Variety of resources used.
   - Creativity of the format.
   - Length within maximum word count.
   - Bibliography and Acknowledgements.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026

Keep an electronic copy of your work as backup!

Tip for hand-made picture story books:
Keep your work unbound and numbered before scanning the pages for electronic submission.

CREATIVE WRITING

UPPER PRIMARY DIVISION

This years' theme celebrates how curiosity, ideas and evidence are planted, grown and shared, empowering everyone to explore scientific concepts creatively.

Your creative writing entry must relate to one of the four specified topics. Each piece should integrate scientific concepts creatively and accurately.

2026 Topics

1. The Magical Microscope
2. The Inventors Treehouse
3. Growing Ideas
4. The Spark Beneath the Surface

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Choose Your Topic:** Your creative writing must focus on one of the above topics. Include your chosen topic on the first page of your Entry as well as Entry Face Sheet.
- ☐ **Format Variety:** Your entry may be presented as an imaginative story in any genre e.g., prose, poetry, drama, detective, horror, or in any creative form including a biography, essay, comic strip, cartoon, graphic novel, diary, letter, and more.
- ☐ **Script Format and Presentation:** Typed or printed scripts are preferred for legibility, but neat handwriting is also acceptable. Remember, the presentation is crucial—entries should be visually appealing and tidy. Poor presentation will negatively impact your score.
- ☐ **Grammar and Spelling:** Attention to grammar and spelling is critical. Proofread your work carefully to ensure accuracy.
- ☐ **Scientific Integration:** You must incorporate scientific information in your story.
- ☐ **Explanation of Key Science Ideas:** A list of at least 5 key science ideas that you used in developing your story with a brief 2-3 sentence explanation must be included as an Appendix. The Judges will be looking for scientific content worked into the story.
- ☐ **Illustrations:** Any illustrations must be original. Hand-drawn or computer-generated illustrations are welcome, but avoid using Clip Art or other downloaded images that could infringe on copyright laws.
- ☐ **Word Count:** Your entry should be between 500 to 1000 words. Make sure to include a word count on the last page of your submission. Entries exceeding the word limit will be penalised.
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

Judging Criteria

Your entry will be judged according to the following criteria:

1. **Scientific Content:**
   - Appropriate amount of scientific content.
   - Integration of science ideas.
   - Identification of basic scientific ideas.
   - Accuracy of scientific ideas.
   - Appendix of key science ideas, each explained in 2-3 sentences (see STS website for examples).
2. **Expression and Presentation:**
   - Grammar and spelling.
   - Clarity of expression.
   - Use of own words and pictures.
   - Development of story line.
   - Originality and creativity.
3. **Format:**
   - Interest of the story beginning.
   - Interest and entertainment in the pictures and story.
   - Quality of the ending.
   - Variety of resources used.
   - Creativity of the format.
   - Length within maximum word count.
   - Bibliography and Acknowledgements.

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CREATIVE WRITING

JUNIOR, INTERMEDIATE AND OPEN SECONDARY DIVISIONS

This years' theme celebrates how curiosity, ideas and evidence are planted, grown and shared, empowering everyone to explore scientific concepts creatively.

Your creative writing entry must relate to one of the four specified topics. Each piece should integrate scientific concepts creatively and accurately.

2026 Topics

1. Nanobot Diaries
2. The Seed Vault Mystery
3. Ripple Effect
4. Code in the Crops

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Choose Your Topic:** Your creative writing must focus on one of the above topics. Include your chosen topic on the first page of your Entry as well as Entry Face Sheet.
- ☐ **Format Variety:** Your entry may be presented as an imaginative story in any genre e.g., prose, poetry, drama, detective, horror, or in any creative form including a biography, essay, comic strip, cartoon, graphic novel, diary, letter, and more.
- ☐ **Script Format and Presentation:** Typed or printed scripts are preferred for legibility, but neat handwriting is also acceptable. Remember, the presentation is crucial—entries should be visually appealing and tidy. Poor presentation will negatively impact your score.
- ☐ **Grammar and Spelling:** Attention to grammar and spelling is critical. Proofread your work carefully to ensure accuracy.
- ☐ **Scientific Integration:** You must incorporate scientific information in your story.
- ☐ **Explanation of Key Science Ideas:** A list of at least 5 key science ideas that you used in developing your story with a brief 2-3 sentence explanation must be included as an Appendix. The Judges will be looking for scientific content worked into the story.
- ☐ **Illustrations:** Any illustrations must be original. Hand-drawn or computer-generated illustrations are welcome, but avoid using Clip Art or other downloaded images that could infringe on copyright laws.
- ☐ **Word Count:** Your entry should be between 500 to 1000 words. Make sure to include a word count on the last page of your submission. Entries exceeding the word limit will be penalised.
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

Judging Criteria

Your entry will be judged according to the following criteria:

1. **Scientific Content:**
   - Appropriate amount of scientific content.
   - Integration of science ideas.
   - Identification of basic scientific ideas.
   - Accuracy of scientific ideas.
   - Appendix of key science ideas, each explained in 2-3 sentences (see STS website for examples).
2. **Expression and Presentation:**
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   - Creativity of the format.
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   - Bibliography and Acknowledgements.

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EXPERIMENTAL RESEARCH

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

Engage in Experimental Research to Explore Your Chosen Topic!

Follow the steps below to ensure your experimental investigation meets all the criteria. As part of your project you will have to submit an Experimental Research Report and an accompanying Oral Presentation Video.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

1. **Choose and Define Your Topic:** Pick a topic that interests you—it does not need to align with this year's theme. Clearly print your chosen topic on your Entry Face Sheet and report's front cover.
2. **Ask Questions:** Develop questions such as 'Why?', 'What if?', and 'How?' to deepen your understanding of the topic. Explore your topic through reading and discussions with peers, teachers or parents.
3. **Form a Hypothesis:** Make an educated guess about what you think will happen under certain conditions. (If you make one change how does it affect another)?
4. **Investigate:** Design and safely conduct experiments to test your hypothesis. Dangerous or unsafe experiments will not be judged.
    - Collect data: use data collection tools like surveys, or logs, to help you collect information.
    - Do it more than once: repeat the experiment a number of times to minimise errors.
    - Change only one thing at a time: use experimental controls and variables to make sure your results are reliable and really show what you are trying to find out.
5. **Record Results:** Document all experimental findings diligently. A survey, if it is used to collect data as part of an investigation, is regarded by STS as an experiment. Maintain a logbook and record everything, or take photographs to record data.
6. **Analyse Results:** Look at the information you gathered and try to understand what it means.
7. **Re-evaluate Your Findings:** Sometimes your experiments might show you something surprising, so you might need to think about your guess again**.** Be prepared to revise and change your original ideas and procedures if you get unexpected results.
8. **Draw Conclusions:** Use what you learned from your experiments to see if your guess was right or wrong. Confirm or reject your hypothesis.
9. **Share Findings:** Write an **Experimental Research Report** to share your discoveries with others. Ensure that the main sections of your report highlight only your experimental results, although you may include information from books or the internet in the introduction to provide background.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Experimental Research Report:** Your report can be written in either passive or active voice and must include the following sections:
    - ☐ **Introduction:** What gave you the idea? How did you get started? Provide some background information on the topic.
    - ☐ **Aim:** What you are trying to find out?
    - ☐ **Hypothesis:** A scientific guess on what you think will happen based on your initial understanding of the topic and your idea.
    - ☐ **Materials**: List everything used!
    - ☐ **Method**: List everything you did, and remember to keep things in order (like a recipe).
    - ☐ **Risk Assessment:** Describe the safety requirements you followed in conducting this experiment. Attach Risk Assessment Form, sample provided on page 35.
    - ☐ **Results**: Present all findings from your experiment. Show what you discovered visually–use graphs, tables, pie charts, photos etc.
    - ☐ **Discussion**: Judges pay particular attention to the quality of your discussion. Consider using the following questions to guide your discussion. (Discussion should not be question/answer style).
        - » What happened and what did you learn? Do you see any patterns emerge?
        - » Did it reflect your hypothesis? Do you think you know why?
        - » Did you find any unexpected results? Can you explain this?

Continued on the next page...

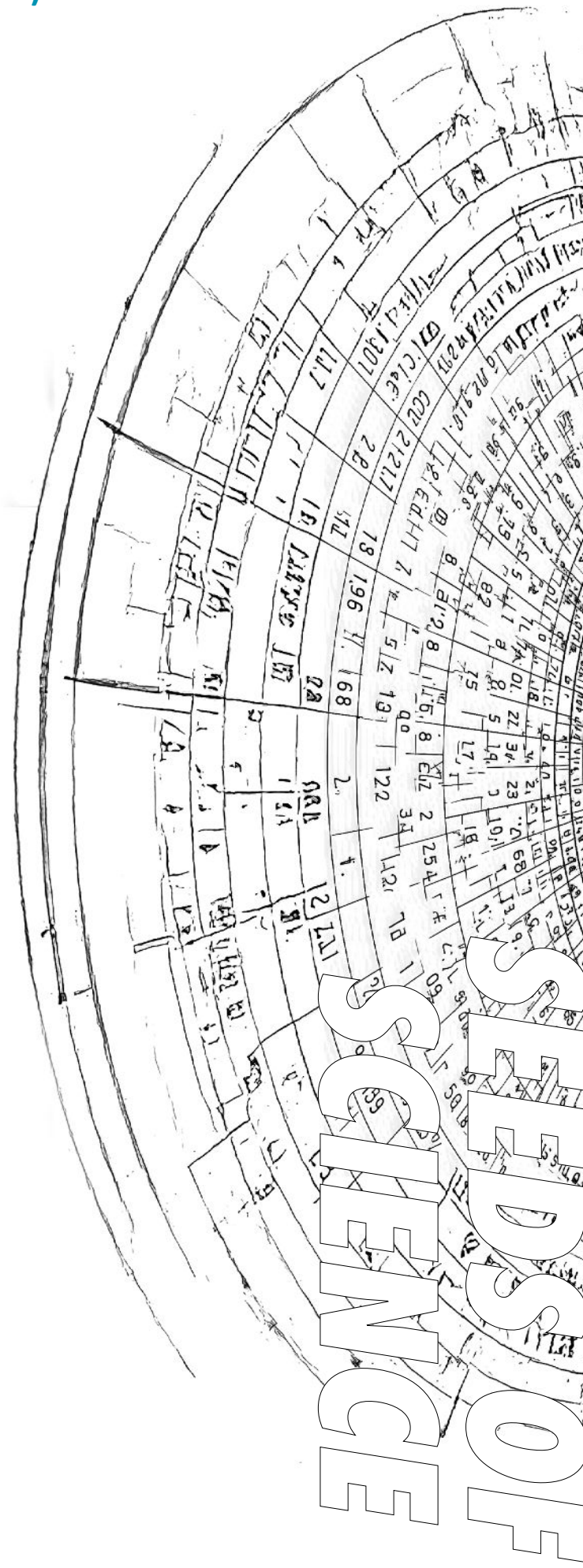
EXPERIMENTAL RESEARCH (CONTINUED)

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

- » What problems did you encounter? How did you minimise them?
- » How could you improve on your experiment or data collection?

- ☐ **Conclusion**: This is a simple paragraph that links back to your aim and hypothesis. Did you find out what you wanted? Was your hypothesis supported?
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

2. **Oral Presentation Video:** Along with your written report, submit an Oral Presentation Video. Your video must be 3-5 minutes long and should be submitted in .mp4 format. The video should address the following questions:
   - ☐ What inspired you to research this topic?
   - ☐ What was your hypothesis?
   - ☐ How did you decide on your experimental method?
   - ☐ What did you find out? Was it what you expected?
   - ☐ What would you change or improve for next time?



Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

EXPERIMENTAL RESEARCH

JUNIOR, INTERMEDIATE AND OPEN SECONDARY DIVISIONS

Engage in Experimental Research to Explore Your Chosen Topic!

Follow the steps below to ensure your experimental investigation meets all the criteria. As part of your project you will have to submit an Experimental Research Report and an accompanying Oral Presentation Video.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

1. **Choose and Define Your Topic:** Select a topic that interests you —it does not need to align with this year's theme. Preferably, choose a topic that introduces you to new knowledge. Utilise existing skills in your exploration. Clearly print your chosen topic on your Entry Face Sheet and report's front cover.
2. **Ask Questions:** What if...? What can I investigate about this topic that is useful to the world or solves a problem? What will this investigation achieve?
3. **Conduct Literature Review:** Research previous work on your topic via libraries or the internet to become familiar with your topic and avoid repeating existing work. Engage in discussions; generate new, creative, original, impactful ideas. Literature Review only submissions will be disqualified.
4. **Conduct Original Experiments:** You can use a standard experiment but you should adapt it, or apply it in a new and original way to solve a problem or benefit the community. Experiment with changes or different conditions to contribute new insights to the field.
5. **Ensure Ethics in Research:** If your research involves psychology or sensitive topics, ensure all ethical standards and scientific rigor are met.
6. **Innovative Investigations:** Projects that solve problems or significantly enhance community life in novel ways will be highly valued by judges.
7. **Form a Hypothesis:** Propose what you expect to happen under specific conditions. Make it clear enough to be definitively supported or rejected by your results.
8. **Investigate:** Design and perform experiments safely and methodically to test your hypothesis. Dangerous or unsafe experiments will not be judged.
   - » Ensure methods are logical and comprehensive.
   - » Use experimental controls and variables to make sure your results are reliable meaningful.
   - » Repeat experiments to minimise errors and gather substantial data. Allow enough time.
9. **Record Results:** Document all experimental findings diligently. A survey, if it is used to collect data as part of an investigation, is regarded by STS as an experiment. Maintain a logbook and record everything, or take photographs to record data.
10. **Analyse Results:** Look at the information you gathered and try to understand what it means.
11. **Re-evaluate Your Findings:** Be ready to adjust your theories or procedures based on unexpected outcomes, which might even include changing the focus of your study.
12. **Draw Conclusions:** Use your data to conclusively support or reject your hypothesis.
13. **Share Findings:** Write an **Experimental Research Report** to share your discoveries with others. Ensure that the main sections of your report highlight only your experimental results, although you may include information from books or the internet in the introduction to provide background.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Experimental Research Report:** Your report can be written in either passive or active voice and must include the following sections:
   - ☐ **Abstract:** Provide a concise summary of what you did and achieved (approx. 100 words).
   - ☐ **Introduction:** Introduce your topic, explaining why it interests you and the key reasons for choosing it. Provide background information and key terms. State the main question your research addresses. Include important insights from your preliminary research to provide context for your findings.
   - ☐ **Aim:** Clearly state the purpose of your investigation and your hypothesis.
   - ☐ **Materials**: Detail all materials and equipment used.
   - ☐ **Method**: Describe the procedure in a step-by-step format, noting actual actions taken. Include any mistakes.
   - ☐ **Risk Assessment:** Describe the safety requirements you followed in conducting this experiment. Attach Risk Assessment Form, sample provided on page 35.

Continued on the next page...

EXPERIMENTAL RESEARCH (CONTINUED)

JUNIOR, INTERMEDIATE AND OPEN SECONDARY DIVISIONS

- ☐ **Results:** Present all findings from your experiment. Show what you discovered visually–use graphs, tables, pie charts, photos, maps etc. All information should be clearly labelled. Where possible, results should involve measurement.
- ☐ **Discussion:** Judges pay particular attention to the quality of your discussion. Consider using the following questions to guide your discussion. (Discussion should not be question/answer style).
  - » Analyse what your results show.
  - » Discuss the implications and validity of your results.
  - » Do you see any patterns or trends?
  - » Did your results support or reject your hypothesis?
  - » What problems did you encounter?
  - » How did you minimise errors?
  - » How could you improve?
- ☐ **Conclusion:** Link your findings back to your hypothesis and aim, stating whether your hypothesis was supported or rejected.
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

2. **Oral Presentation Video:** Along with your written report, submit an Oral Presentation Video. Your video must be 3-5 minutes long and should be submitted in .mp4 format. The video should address the following questions:
   - ☐ What inspired you to research this topic?
   - ☐ What was your hypothesis?
   - ☐ How did you decide on your experimental method?
   - ☐ What did you find out? Was it what you expected?
   - ☐ What would you change or improve for next time?

Judging Criteria

All judging will take place online for 2026.

Projects will be evaluated based on:

- Level of student involvement in decision-making.
- Scientific skills and knowledge acquired.
- Quality of science demonstrated within the project.
- Extent of learning and knowledge expansion beyond the classroom.
- Originality and creativity of the chosen topic.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

EXPERIMENTAL RESEARCH – CLASS PROJECT

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

Engage in Experimental Research, as a class, to Explore Your Chosen Topic!

The Experimental Research- Class Project provides the opportunity for classes to undertake experimental research of greater scope than is possible within individual or group entries. Classes may choose to explore a hypothesis in depth or investigate a set of linked hypotheses.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Participants:** Open only to Lower, Middle, and Upper Primary students. Each school may submit a maximum of 8 entries across these divisions.
- ☐ **Project Requirements:** The project must be based around the investigation of a hypothesis (question) through experimental research.
- ☐ **Student Involvement:** All students listed within the class entry must be actively involved in the project.
- ☐ **Choose and Define Your Topic:** Select a topic of interest—it does not need to align with this year's theme. Clearly print your chosen topic on your Entry Face Sheet and report's front cover.
- ☐ **Identification:** Clearly identify the class, e.g., Victoria Primary School – Year 1, Class XXX.
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List all teachers/adults who provided advice and assistance and outline the ways in which they supported the class research project.

Documentation Criteria

You must electronically submit three (3) components that include the following.

1. **Experimental Research Report:** A detailed report outlining the aim, hypothesis, methodology, results, and conclusions of the experiment.
   - ☐ The research and written report must follow the **Entry Guidelines** and **Documentation Criteria** for **Written Experimental Research Report** Lower, Middle and Upper Primary Division (pp. 16-17).
   - ☐ Bibliography and Acknowledgement sections for the whole project should be included at the end of the report.
2. **Evidence of Class Involvement:** Evidence must demonstrate the active participation of all students in the class and assist them in explaining the scientific learning achieved through the project during their oral presentations. It should be submitted as a standalone .pdf document or a 3-5 minute video in .mp4 format. The following forms of evidence are acceptable:
   - ☐ **Student Contributions:** Experimental notes, drawings, and diagrams created by the students.
   - ☐ **Visual Displays:** Photographic posters and models.
   - ☐ **Project Outputs:** Physical or digital products resulting from the experimental investigation.

Requirements for Evidence:

- » All evidence must be original work produced by the students.
- » Any adult assistance in producing or compiling the evidence must be explicitly acknowledged to maintain transparency.

Continued on the next page...

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

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EXPERIMENTAL RESEARCH – CLASS PROJECT (CONTINUED)

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

3. **Oral Presentation Video:** Along with your written report, you must submit an Oral Presentation Video, recorded by the class representatives, that summarises the project findings and insights. This presentation should convey the scientific learning and outcomes effectively. This video must be 5-10 minutes long and should be submitted in .mp4 format. Address the following:
   - ☐ What decisions did your class have to make during the experimental research?
   - ☐ What science have you learnt from doing this research project?
   - ☐ When doing experimental research what important skills must you use?
   - ☐ How was the workload distributed amongst the members of your class?
   - ☐ How does the scientific learning extend beyond the classroom. What are the wider world applications?
   - ☐ What problems and/or errors occurred during the experimental process? How did you overcome these?

Oral Presentation Guidelines

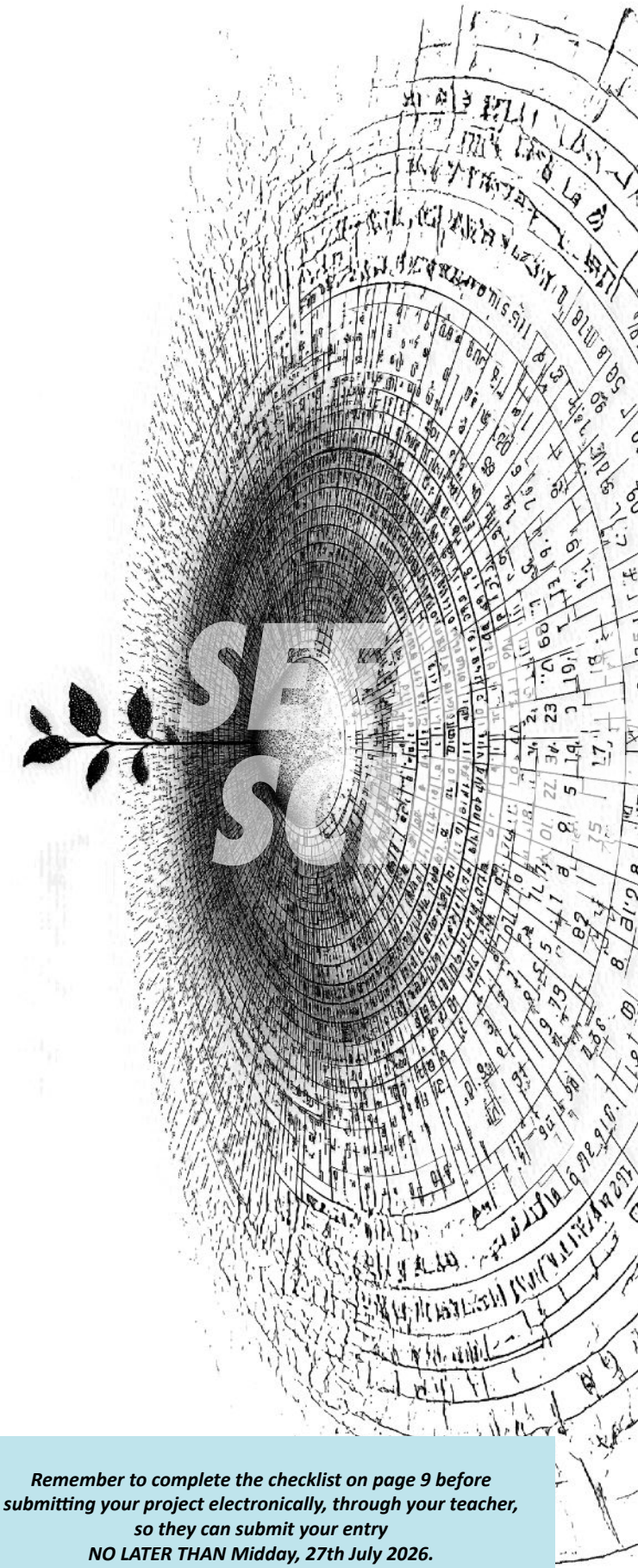
- **Content Focus:** When preparing your oral presentation the focus should be on the results and discussion sections of the project. The Aim, Method and Materials will be judged from the written report and need not be reiterated verbally.
- **Communication Skills:** Judges look favourably on the students' ability to articulate scientific concepts beyond the initial investigation and their understanding of errors within the scientific process (part of discussion in written report).

Judging Criteria

All judging will take place online for 2026.

Projects will be evaluated based on:

- Level of student involvement in decision-making.
- Scientific skills and knowledge acquired.
- Quality of science demonstrated within the project.
- Extent of learning and knowledge expansion beyond the classroom.
- Originality and creativity of the chosen topic.



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GAMES

ALL DIVISIONS

Create a Game to Explore and Educate on Real-World Issues!

The Games section offers participants a unique opportunity to create educational games based on scientific principles. This year's theme, 'Seeds of Science', can serve as an inspiring foundation for your game, although you are free to choose any topic that addresses a real issue.

Your entry is not limited to board games. Consider a variety of formats such as card games that teach a scientific concept, games that incorporate storytelling or drawing, or activities where players act out scientific events. The judging criteria are designed to accommodate various types of games, focusing on originality and creativity. Games should be innovative and not too closely modelled on existing games. Note that computer games should be submitted under the Computer Programs section.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Scientific Foundation:** The game must present and elaborate on a scientific concept.
- ☐ **Research-Driven:** Show that your game is developed based on thorough research.
- ☐ **Focus on Solutions:** Target real-world problems (e.g., focus on 'water pollution' rather than just 'water').
- ☐ **Engagement and Clarity:** Design your game to be engaging and easily understandable.
- ☐ **Educational Impact:** The game should require active involvement from players, encouraging them to complete tasks, answer questions, and make decisions.
- ☐ **Scientific Depth:** If it is a board game, avoids having players land on 'luck' squares and being sent off without teaching them anything or finding out if they know anything.
- ☐ **Creative Problem Solving:** Include tasks that promote problem solving and concept development rather than questions that require recall of facts. If you ask questions, don't make them trivial or obscure.
- ☐ **Originality and Fun:** Make sure the game is original, enjoyable, and fun to engage with.
- ☐ **Attractive Presentation:** Ensure the game is well-packaged, self-contained, and all pieces are securely included.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Written Report (500-1000 words):**
   - ☐ **Aim:** Explain the purpose/aim of your game.
   - ☐ **Age:** Specify the age group the game is aimed at and make it appropriate for the target audience.
   - ☐ **Instructions:** Include a clear set of step-by-step instructions or rules.
   - ☐ **Discussion (A4 page long):** Discuss what aspect of science the game is intended to teach.
   - ☐ **Images:** Include photographs of your game to visually support the textual descriptions in your report.
   - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
   - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.
2. **Oral Presentation Video:** Along with your written report, submit an Oral Presentation Video that demonstrates to the judges what your game is about and how it works. This video must be 3-5 minutes long and should be submitted in .mp4 format. It should be broken into two parts:
   - ☐ **Part One: Game Overview**
     - » **Introduction:** Introduce your game, including the target audience, the chosen topic, and how the game is played (instructions and rules). Explain the aim of the game and how success is achieved, along with the issues involved.
     - » **Scientific Content:** Discuss the scientific concepts your game aims to teach and how it encourages players to engage in problem-solving and conceptual development.
   - ☐ **Part Two: Game Demonstration**
     - » **Interactive Walkthrough:** Show how the game works in practice. Play through parts of the game during your presentation to demonstrate its functionality and educational potential, linking back to the science the game is supposed to teach.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

INVENTIONS

ALL DIVISIONS

Design a Device to Solve a Real-World Problem!

This section challenges students to explore any scientific area that interests them and to apply their knowledge to develop a WORKING invention.

What Is an Invention?

Inventions are innovative and original devices or applications of technology which solve a problem.

Whether creating a completely new device, method, or process, or improving an existing one, the scope is limited only by your imagination. Inventions should address real-world issues and demonstrate practical application. This section is distinct from Information and Scale Models. For more about Working Models, refer to page 31.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Functionality:** Your invention must be presented as a WORKING invention.
- ☐ **Size and Weight Limits:** The invention should not exceed dimensions of 0.5m x 0.5m x 0.5m and should weigh no more than 15 kg, unless special permission is granted by the STS Coordinator.
- ☐ **Safety:** The invention must be safe to operate in crowded areas and include appropriate safety features (e.g., boilers must have correctly operating safety valves). Dangerous chemicals must not be used and rocket- type inventions will not be judged. Projects involving cruelty to animals will not be accepted. Due to safety standards, STS recommends students use their own battery pack for power.
- ☐ **Problem-Solving:** Clearly demonstrate how your invention addresses a real problem.
- ☐ **Construction Quality:** Your invention should be well-constructed and durable.
- ☐ **Resourcefulness and Materials:** Show ingenuity in the choice and use of materials, considering their properties.
- ☐ **Design Brief:** Include a design brief that outlines the scientific principles of your invention and its application.
- ☐ **Usability:** Ensure the invention is user-friendly and include clear operating instructions.
- ☐ **Scientific Application:** Demonstrate a high level of applied scientific principles.
- ☐ **Originality:** Your invention is highly original, innovative and inventive. (Scale models of existing devices should be entered in the Working Models section.) Be sure to research thoroughly that your invention has not been tried already.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Written Report (max 1000 words):** Accompany your invention with a detailed report that includes the following:
   - ☐ **Introduction (Focus on the 'why')**: Introduce your innovation, set the stage for the project.
     - » Briefly introduce the invention, emphasising its uniqueness.
     - » Explain why this invention was developed, including any personal motivations or broader issues it addresses. This helps establish the relevance of the project.
     - » Discuss what is new or innovative about the invention compared to existing solutions.
     - » Highlight how the invention contributes to or improves upon existing technologies or methods in addressing the identified problem.
   - ☐ **Aim(s)**: Clearly state the specific problem or issue the invention aims to solve, linking this to the innovation's purpose.
   - ☐ **Operating Instructions:** List operating instructions of your invention.
   - ☐ **Design Brief (Focus on the 'how'):**
     - » Describe the process of constructing the device, focusing on the practical and technical aspects.
     - » Explain how scientific principles were applied during the design and construction phases. This is crucial for demonstrating the thought process behind structural and functional decisions.
     - » Include detailed annotated diagrams or drawings that clearly illustrate the design and functionality of the invention. Each component's role should be explicitly described, showing how it contributes to the overall operation and effectiveness of the invention.
   - ☐ **Safety Considerations:** List any safety considerations in your design, in both the construction and use of the device. Attach Risk Assessment Form, see sample on page 35.

Continued on the next page...

INVENTIONS (CONTINUED)

ALL DIVISIONS

- ☐ **Discussion (Focus on the 'outcome')**:
  - » Re-introduce your invention, noting the societal, environmental, or economic issues it addresses and its designed purpose to solve these problems.
  - » Explain how your invention effectively solves the intended problem, with supporting examples or scenarios that demonstrate its practical use.
  - » Discuss the scientific principles that underpin your invention, detailing how they are applied within its functioning to enhance its effectiveness.
  - » Outline how your invention demonstrates specific scientific principles structurally and the engineering strategies employed in its development.
  - » Present a summary of field testing results that verify the invention's performance and reliability, discussing key data points and test parameters.
  - » Assess any limitations encountered during the development and propose future improvements or research directions to enhance the invention's design and functionality.
  - » Describe challenges faced during the design and testing phases and how these were resolved, reflecting on the problem-solving processes used.
- ☐ **Photography:** Include photographs of your invention to visually support the textual descriptions in your report, or include them in an Appendix at the end of your report.
- ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
- ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.
- ☐ **Appendix:** include a copy of your logbook or any other artifacts, if applicable.

2. **Oral Presentation Video:** Along with your written report, submit an Oral Presentation Video that demonstrates to the judges how your invention works and the scientific principles behind it. This video must be 3-5 minutes long and should be submitted in .mp4 format. It should be broken into two parts:
   - ☐ **Part One: Invention Overview**
     - » **Introduction:** Introduce your invention, specifying the target audience, the problem it addresses, and how it is used. Outline the main objectives of the invention and how it achieves these objectives.
     - » **Innovation and Functionality:** Explain how your invention is original, innovative, or inventive. Discuss how it solves a real-world problem and the functionality of the device (i.e., how well it works).
   - ☐ **Part Two: Invention Demonstration**
     - » **Interactive Walkthrough:** Show the invention in action. Demonstrate how to use the device, emphasising the design, materials used, suitability, and any design challenges encountered and how they were overcome.
     - » **Scientific Principles:** Detail the scientific principles your invention utilises, focusing on how these principles are applied in the design and operation of the device. Highlight your understanding of the science involved.

Note: Judges will look for evidence of research and depth of understanding that went into the development of the invention's scientific aspects.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

There wil not be an in person Judging Day for 2026. All judging will take place online.

SCIENCE PHOTOGRAPHY

ALL DIVISIONS

Capture the Art of Science Through Digital Photography!

In this section, participants are invited to submit digital photographs that capture a scientific event or illustrate a scientific phenomenon. You may submit a series of three to six connected photographs centered around a common theme. This year's theme, 'Seeds of Science', can serve as an inspiration for you, although you are free to choose any topic that interests you.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- **Photography Authenticity:** All photographs must be taken by the entrant using a digital camera. Any enhancements to the photographs must also be done by the entrant.
- **Copyright:** Images cannot be taken from other print or electronic sources.
- **Originality Verification:** The official Entry Face Sheet, signed by the student, teacher, and parent/guardian, must accompany the submission to verify originality. Submissions without this verification will not be eligible for a bursary.
- **Ethical Considerations:** Prints that indicate cruel or dangerous procedures have been used will not be judged.

Documentation Criteria

You must electronically submit three (3) components that include the following.

1. **Digital Image Presentation:**
   - ☐ **Number of Photos:** Submit only 3 to 6 digital photographs.
   - ☐ **Presentation Format:** Each photograph must be presented on individual slides within a PowerPoint presentation and submitted as a PDF document. No other presentation forms are permitted.
   - ☐ **Photo Details:** Each photo must include:
     - » A Title.
     - » A caption of 1-2 sentences explaining the scientific relevance of each photo.
2. **Written Report (500-1000 words):** Accompany your slide show with a detailed report that includes the following:
   - ☐ **Aim:** State clearly what you intended to do in terms of the scientific aspect of the theme you explored and the photography.
   - ☐ **Method**: State clearly how you set up and took your photographs. Include information about the type of camera, other hardware and software you used. Explain how you altered the images (if relevant).
   - ☐ **Scientific Content:** Describe the scientific principles or ideas you are displaying in your photographs and the relevance of the particular photographs you have selected.
   - ☐ **Original Images:** Provide the original, unaltered digital images as part of the explanation of the process undertaken, regardless of whether you altered the final images.
   - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
   - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.
3. **Oral Presentation Video:** Prepare an oral presentation video that summarises to the judges your project. This video must be ideally 2 minutes long and should be submitted in .mp4 format. Do not read directly from the report, instead address the following points:
   - ☐ What is the theme of your photographs?
   - ☐ Explain the scientific principles or ideas shown in your photographs and why you chose those images.
   - ☐ Explain the techniques you used to produce the photographs.

Judging Criteria

- Adherence to entry guidelines and documentation criteria.
- Explanation of the scientific topic/theme.
- Scientific relevance of photographs.
- Technical skill in producing the photographs.
- Dramatic impact and presentation.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026

Keep an electronic copy of your work as backup!

SCIENTIFIC POSTERS

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

Create a scientific poster to explore the theme 'Seeds of Science: Nurturing Knowledge for All'!

This years' theme celebrates how curiosity, ideas and evidence are planted, grown and shared, empowering everyone to explore scientific concepts creatively.

Participants are invited to create a scientific poster in a digital format, that visually and effectively communicates scientific and technical principles. Your poster should clearly demonstrate the relevance and impact of your chosen topic through well-integrated diagrams and concise text.

Your scientific poster entry must relate to one of the four specified topics.

2026 Topics

1. Bioluminescence Dreams
2. The Secret World of Germs
3. Biotech Buds
4. The Seeds of Science

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Format:** Posters must be created digitally. You can use a PowerPoint template provided HERE.
- ☐ **File Format:** Submit as a high-resolution PDF.
- ☐ **Resolution and Aspect Ratio:** Minimum resolution of 1920x1080 pixels. While both landscape and portrait formats are acceptable, landscape may be better suited for digital displays.
- ☐ **Originality and Authorship:** All text and visual elements must be original and created by the entrant.
  - » Text must be in your own words.
  - » Visual elements may be either hand drawn or using digital drawing tools, or original photographs. Use of AI or stock imagery is not acceptable.
  - » Scanned pictures, photographs, diagrams copied from other sources or downloaded from the internet are not acceptable.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Scientific Poster in Digital Format:** Your poster should include the following:
   - ☐ **Text and Layout:**
     - » Include a main heading for the topic and subheadings for detailed concepts.
     - » Headings and subheadings should be easily readable when viewed full-size on a variety of devices, including laptops and desktop monitors.
     - » Use a clear, readable font size.
     - » Keep text concise; aim to explain topic ideas briefly yet effectively.
     - » **Word Limit:** 500 words, excluding headings, diagram labels, bibliography, and acknowledgements.
   - ☐ **Scientific Content:** Provide clear explanations of scientific and technical principles illustrated by your poster, using diagrams as visual aids.
   - ☐ **Real-World Relevance:** Detail the significance and impact of the scientific topic you chose in real-world contexts, supported by relevant diagrams.
   - ☐ **Visual Elements:** Include at least three relevant visual diagrams or infographics that clearly illustrate and support the scientific and technical principles and the topic's real-world relevance.
     - » Diagrams must be high quality, clearly labeled, and referenced within the text.
     - » Ensure diagrams are visible and legible when the poster is displayed on various digital devices.
   - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34). Put these in a small box at the bottom corner of the poster.
   - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you. List below Bibliography.

Continued on the next page...

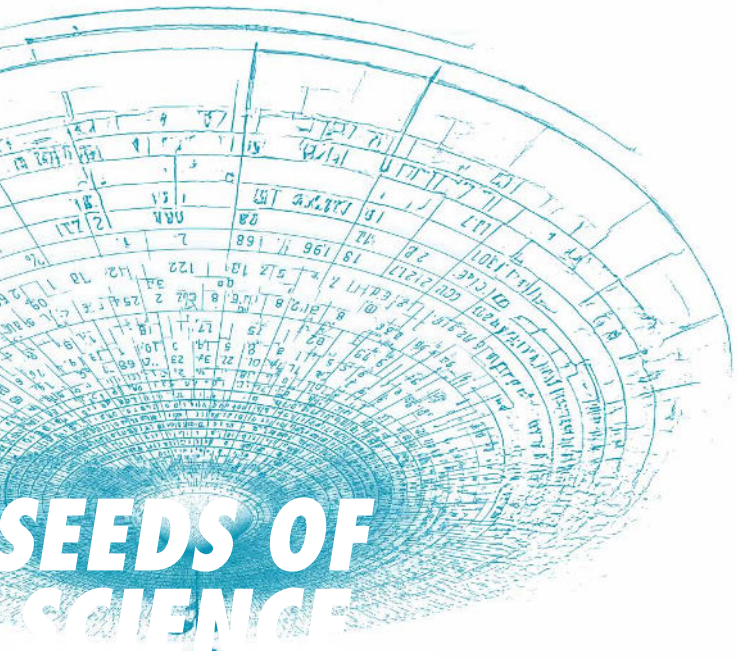
SCIENTIFIC POSTERS (CONTINUED)

LOWER, MIDDLE AND UPPER PRIMARY DIVISIONS

2. **Oral Presentation Video:** Prepare an Oral Presentation Video that summarises your poster for the judges. This video must be 3-5 minutes long and should be submitted in .mp4 format. Address the following points without reading directly from the poster:
   - ☐ State the topic you have chosen and its relevance to this year's theme.
   - ☐ Explain the scientific and technical principles involved, referencing the diagrams used.
   - ☐ Discuss the significance and impact of the topic in the real world.
   - ☐ Describe the design process of your poster, including the software used and how you created the visual elements.
   - ☐ Address poster guidelines such as size and text visibility on standard monitors.
   - ☐ Ensure the poster is shown during the presentation.

Judging Criteria

- Adherence to the specified digital poster and documentation guidelines.
- Clarity, depth, and scientific accuracy of the content.
- Creativity and visual appeal of the poster design.
- Overall impact and presentation quality of the poster.



Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

SCIENTIFIC POSTERS

JUNIOR, INTERMEDIATE AND OPEN SECONDARY DIVISIONS

Create a scientific poser to explore the theme 'Seeds of Science: Nurturing Knowledge for All'!

This years' theme celebrates how curiosity, ideas and evidence are planted, grown and shared, empowering everyone to explore scientific concepts creatively.

Participants are invited to create a scientific poster in a digital format, that visually and effectively communicates scientific and technical principles. Your poster should clearly demonstrate the relevance and impact of your chosen topic through well-integrated diagrams and concise text.

Your scientific poster entry must relate to one of the four specified topics.

2026 Topics

1. Peering into the Invisible
2. Electric Sparks to Global Power
3. Radioactivity Revealed
4. Mapping the Mind

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Format:** Posters must be created digitally. You can use a PowerPoint template provided HERE.
- ☐ **File Format:** Submit as a high-resolution PDF.
- ☐ **Resolution and Aspect Ratio:** Minimum resolution of 1920x1080 pixels. While both landscape and portrait formats are acceptable, landscape may be better suited for digital displays.
- ☐ **Originality and Authorship:** All text and visual elements must be original and created by the entrant.
    - » Text must be in your own words.
    - » Visual elements may be either hand drawn or using digital drawing tools, or original photographs. Use of AI or stock imagery is not acceptable.
    - » Scanned pictures, photographs, diagrams copied from other sources or downloaded from the internet are not acceptable.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Scientific Poster in Digital Format:** Your poster should include the following:
    - ☐ **Text and Layout:**
        - » Include a main heading for the topic and subheadings for detailed concepts.
        - » Headings and subheadings should be easily readable when viewed full-size on a variety of devices, including laptops and desktop monitors.
        - » Use a clear, readable font size.
        - » Keep text concise; aim to explain topic ideas briefly yet effectively.
        - » **Word Limit:** 500 words, excluding headings, diagram labels, bibliography, and acknowledgements.
    - ☐ **Scientific Content:** Provide clear explanations of scientific and technical principles illustrated by your poster, using diagrams as visual aids.
    - ☐ **Real-World Relevance:** Detail the significance and impact of the scientific topic you chose in real-world contexts, supported by relevant diagrams.
    - ☐ **Visual Elements:** Include at least three relevant visual diagrams or infographics that clearly illustrate and support the scientific and technical principles and the topic's real-world relevance.
        - » Diagrams must be high quality, clearly labeled, and referenced within the text.
        - » Ensure diagrams are visible and legible when the poster is displayed on various digital devices.
    - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34). Put these in a small box at the bottom corner of the poster.
    - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you. List below Bibliography.

Continued on the next page...

SCIENTIFIC POSTERS (CONTINUED)

JUNIOR, INTERMEDIATE AND OPEN SECONDARY DIVISIONS

2. **Oral Presentation Video:** Prepare an Oral Presentation Video that summarises your poster for the judges. This video must be 3-5 minutes long and should be submitted in .mp4 format. Address the following points without reading directly from the poster:
   - ☐ State the topic you have chosen and its relevance to this year's theme.
   - ☐ Explain the scientific and technical principles involved, referencing the diagrams used.
   - ☐ Discuss the significance and impact of the topic in the real world.
   - ☐ Describe the design process of your poster, including the software used and how you created the visual elements.
   - ☐ Address poster guidelines such as size and text visibility on standard monitors.
   - ☐ Ensure the poster is shown during the presentation.

Judging Criteria

- Adherence to the specified digital poster and documentation guidelines.
- Clarity, depth, and scientific accuracy of the content.
- Creativity and visual appeal of the poster design.
- Overall impact and presentation quality of the

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

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VIDEO PRODUCTIONS

ALL DIVISIONS

Create A Video To Explore And Educate On Scientific Principles Through Motion, Color, And Sound!

This section challenges participants to produce a video that emphasises scientific principles where motion, color, and sound play crucial roles. While you are encouraged to follow this year's theme, 'Seeds of Science' feel free to choose any scientific topic that interests you.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

- ☐ **Content and Focus:** Your video should:
  - » **Scientific Content:** Your video should effectively communicate the scientific content, delving deeper than mere demonstrations (e.g., rather than just showing how to safely light a Bunsen burner, explain why the flame is blue or yellow).
  - » **Creativity and Clarity:** Demonstrate originality, creativity, and clarity of thought.
  - » **Viewer Impact**: Emphasise the impact of the video on the viewer.
  - » **Production Skills:** Showcase your video production skills.
- ☐ **Technical Quality:**
  - » **Equipment and Software:** Use high-quality recording equipment and editing software to maintain the original resolution.
  - » **Video Techniques:** Enhance your presentation by employing various techniques such as editing clips, adding music, creating time-lapse sequences, superimposing graphics, zooming, fading transitions, and adjusting audio levels.
- ☐ **Collaboration and Assistance:** While making your video, you may require additional help, such as 'extras' to act or assist with camera work. It's acceptable to include such assistance provided that:
  - » The primary creative and technical efforts are executed by the project's registered students.
  - » The level of presentation or technical sophistication does not exceed what could reasonably be expected of the entrants' own skills.
  - » This assistance should not undermine the authenticity or intellectual ownership of the project by the listed participants.
- ☐ **Originality and Self-containment:**
  - » Ensure that your video is an original work created by you and has not been previously entered or recorded from another person's work.
  - » The video should be self-contained, and not rely on any external materials like posters, notes, or specimens. It will be judged solely on its own merits.

Documentation Criteria

You must electronically submit two (2) components that include the following.

1. **Video Production Project:**
   - ☐ **Duration and Format:** Your video must not exceed 5 minutes, including credits. Use any movie-making software to create your video and export it in .mp4 format. Refer to page 24 for naming your file.
   - ☐ **Credits:** The program must end with a list of credits, including video equipment and software used, as well as any scientific references consulted.
   - ☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).
   - ☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.
2. **Oral Presentation Video:** Prepare a 3-5 minute Oral Presentation Video that summarises to the judges the scientific content of your video project and explains the techniques used to produce it. This video must be submitted in .mp4 format. In your presentation address the following points:
   - ☐ What inspired you to choose this topic?
   - ☐ Describe your video and what you expect the audience to see.
   - ☐ What scientific principles are demonstrated by your video?
   - ☐ What resources did you use?
   - ☐ Who assisted with the production, and who did the camera work?
   - ☐ How long did the project take?
   - ☐ What did you learn?
   - ☐ Discuss any editing involved and how it was accomplished.

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

WORKING MODELS

ALL DIVISIONS

Explore Scientific Principles with Working Models!

Participants are encouraged to explore any scientific area of interest by creating a WORKING Model that either scales up or down an existing device or demonstrates a scientific concept or technique. These models should not only replicate or simulate but also showcase the underlying scientific principles. Note that Information and Scale Models are distinct from Inventions. Refer to page 23 for more information about the Inventions section.

Scale Models:

- **Purpose:** Scale models are scaled representations of existing technologies, constructed to simulate their operation and demonstrate the scientific principles behind them.
- **Example:** For instance, a scale model of a small-scale radio telescope could be built to demonstrate how radio waves are received and processed.

Information Models:

- **Purpose:** These models are designed to demonstrate scientific principles or simulate scientific techniques, often using alternative materials to represent processes that cannot be seen with the naked eye.
- **Example:** To illustrate electron flow through a wire, larger visible objects could be used to represent electrons, making the process understandable.

Tick that you have satisfied each of the guidelines and criteria to make sure you have everything you need!

Entry Guidelines

☐ **Model Specifications:**

- » **Functionality:** Your model must be a WORKING demonstration of the principle it represents.
- » **Size and Weight:** The model should not exceed dimensions of 0.5m x 0.5m x 0.5m and should weigh no more than 15 kg, unless special permission is granted.
- » **Safety:** Models must be safe to operate, with appropriate safety features installed. Models that involve dangerous chemicals, cruelty to animals, or rocket models will not be judged.

☐ **Construction:**

- » Scale models should be accurately represent , as far as practicable, the original idea.
- » Information models should have creative and innovative presentation.
- » Commonly replicated models like volcanoes are discouraged unless exceptionally creative. Models constructed from pre-made kits will score poorly.
- » **Construction Quality:** The model should be robust, well-constructed, and easy to operate with clear instructions provided.
- » **Resourcefulness:** Demonstrate ingenuity in the choice and use of materials, considering their properties to enhance the functionality and educational value of the model.
- » **Scientific Accuracy:** The scientific principle used is clearly understood and effectively demonstrated through the operation of the model. Scale models should accurately illustrate one or two major scientific concepts. Any deviations from scale or simplifications should be clearly justified.

1. **Written Report (Max 1000 words):** Accompany your model with a detailed report that includes the following:

   ☐ **Introduction (Focus on the 'why')**: Introduce your model, set the stage for the project.

   - » Briefly introduce your model, emphasising its uniqueness and purpose.
   - » Explain why your model was developed, including any personal motivations or broader issues it addresses. This helps establish the relevance of the project.
   - » Clearly identify whether your model is a scale model or an information model.

   ☐ **Design Brief (Focus on the 'how'):**

   - » Describe the process of constructing the model, focusing on the practical and technical aspects.
   - » Explain how scientific principles were applied during the design and construction phases. This is crucial for demonstrating the thought process behind structural and functional decisions.
   - » Include detailed annotated diagrams or drawings that clearly illustrate the design and functionality of the model. Each component's role should be explicitly described, showing how it contributes to the overall operation and effectiveness of the model.

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WORKING MODELS (CONTINUED)
ALL DIVISIONS

- » For **Scale Models**, discuss the suitability of your model in explaining the scientific principles demonstrated. Note any deviations from the actual size ratio and the reasons.
- » For **Information Models**, highlight the originality, innovation, and creativity in demonstrating the scientific principles.

☐ **Operating Instructions:** List operating instructions of your model.

☐ **Safety Considerations:** List any safety considerations in your design, in both the construction and use of the model. Attach Risk Assessment Form, see sample on page 35.

☐ **Discussion (Focus on the 'outcome')**:

- » Re-introduce your model, describe the content in which it exists and reiterate its value.
- » Explain how your model effectively demonstrates a scientific concept or technique, with supporting examples or scenarios that demonstrate its practical use.
- » Discuss the scientific principles that underpin your model, detailing how they are applied within its functioning to enhance its effectiveness.
- » Outline how your model demonstrates specific scientific principles structurally and the engineering strategies employed in its development.
- » Present a summary of field testing results that verify the model's performance and reliability, discussing key data points and test parameters (if applicable).
- » Assess any limitations encountered during the development and propose future improvements or research directions to enhance the model's design and functionality.
- » Describe challenges faced during the design and testing phases and how these were resolved, reflecting on the problem-solving processes used.

☐ **Photography:** Include photographs of your model to visually support the textual descriptions in your report, or include them in an Appendix at the end of your report.

☐ **Bibliography:** Include a list of all references used (books, articles, websites, etc.), cited in the correct format (refer to page 34).

☐ **Acknowledgements:** List people who gave you help/advice and outline the ways in which they helped you.

☐ **Appendix:** include a copy of your logbook or any other artifacts, if applicable.

2. **Oral Presentation Video:** Along with your written report, submit an Oral Presentation Video that demonstrates to the judges how your model works and the scientific principles behind it. This video must be 3-5 minutes long and should be submitted in .mp4 format. It should be broken into two parts:

☐ **Part One: Model Overview**

- » **Introduction:** Introduce your model, specifying the scientific principles it demonstrates and its intended purpose.
- » **Design:** Discuss the design of the device, including the parts and materials used, and the suitability and challenges of the design brief. Specifically address:
  - **For Scale Models**: Detail the accuracy of the scale model and where exceptions to scale were made.
  - **For Information Models:** Highlight how your model creatively demonstrates scientific principles.

☐ **Part Two: Model Demonstration**

- » **Interactive Walkthrough:** Demonstrate the use of the model, emphasising any innovative design features, the materials used, and how these contribute to the model's functionality. Discuss any design challenges encountered and how these were overcome.
- » **Scientific Principles:** Detail the scientific principles your model utilises, focusing on how these principles are integrated into the design and function of the model. Highlight your depth of understanding of the science involved.

Continued on the next page...

Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

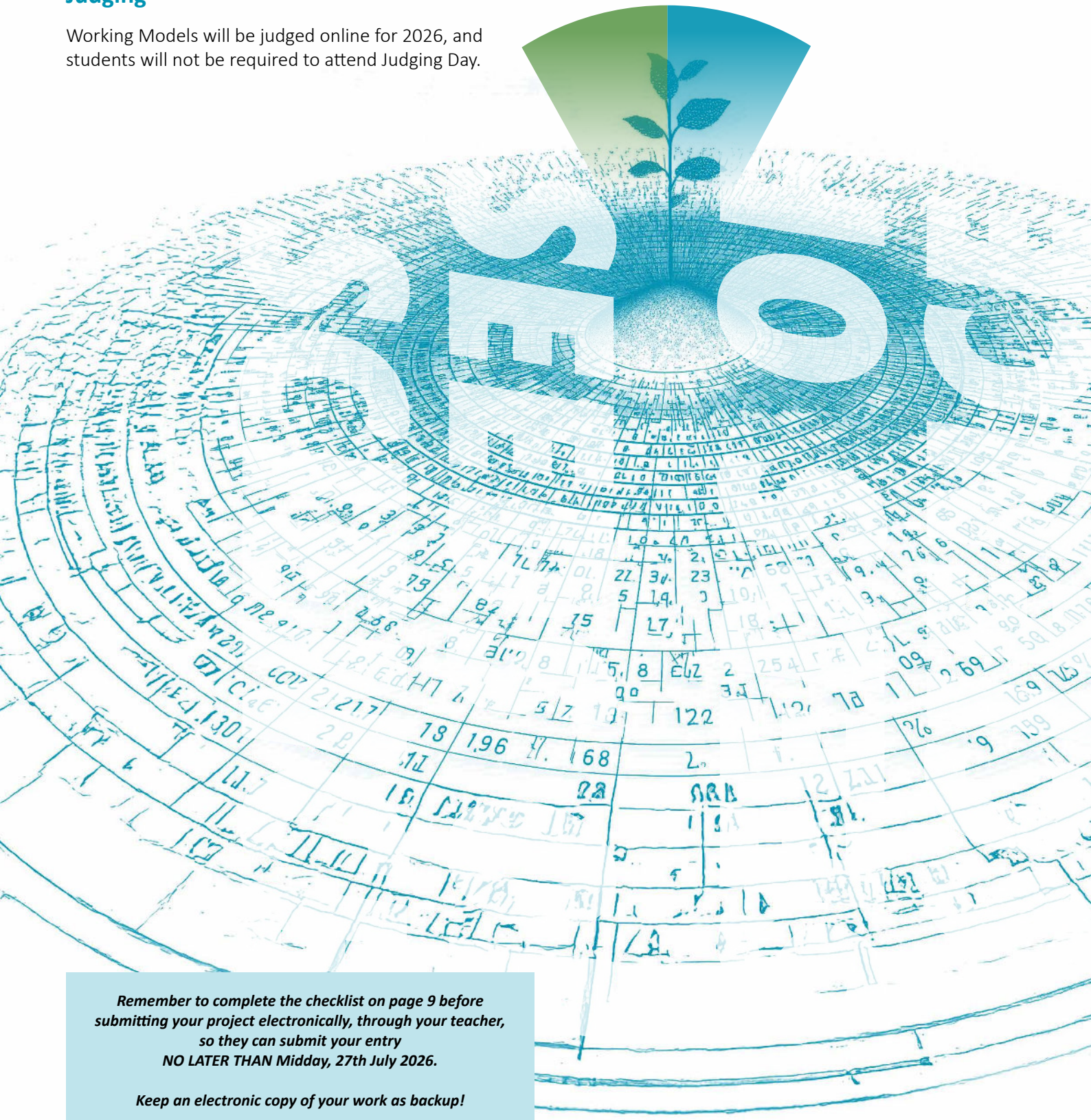
WORKING MODELS (CONTINUED)

ALL DIVISIONS

Note: Judges will look for evidence of research and depth of understanding that went into the development of the model's scientific aspects.

Judging

Working Models will be judged online for 2026, and students will not be required to attend Judging Day.



Remember to complete the checklist on page 9 before submitting your project electronically, through your teacher, so they can submit your entry NO LATER THAN Midday, 27th July 2026.

Keep an electronic copy of your work as backup!

There wil not be an in person Judging Day for 2026. All judging will take place online.

HOW TO USE CITATIONS AND BIBLIOGRAPHIES

What Does it Mean to Cite a Source?

Citing a source means you are giving credit to the ideas or words you have used from someone else in your project. It's like saying, "These facts or ideas came from this person or place." When you cite a source, you help others see where you got your information, which supports your work's credibility and allows others to find that information themselves.

Why Cite Sources?

Citing sources is essential in scientific work as it lends credibility to your project, demonstrates thorough research, and allows others to verify your data or explore further. Citing a source means you are giving credit to the ideas or words you have used from someone else in your project. It also shows respect for the intellectual property of researchers and authors whose work has contributed to your project.

What Needs to be Cited?

Any factual data (dates, figures), graphs, diagrams, quotations, or opinions derived from other works must be clearly cited in your project. It's equally important to acknowledge any form of assistance received from others.

Methods of Citing Others' Work

1. **Footnotes:** After stating a fact, a superscript number can be placed, which corresponds to a footnote at the bottom of the page.
   - » **Example (in-text):** The LD50 is the amount per kilogram body mass which will kill half the animals it is given to.[1]
   - » **Footnote (bottom of page):** 1. Coghill, Graham (1985) 'Sciencescope 2', Heinemann Educational Australia, p. 167.
   - » **The footnote should follow this format:** Author's Last Name, First Name (Publication Year) 'Title of the Book', Publisher, Page Number.
2. **In-text Citations:** Include the source directly following the fact within brackets.
   - » **Example:** The LD50 is the amount per kilogram body mass which will kill half the animals it is given to (Coghill, 1985, p. 167).

Why Create a Bibliography?

A bibliography is a detailed list at the end of your project that includes all the sources you read or looked at, even if you didn't mention them directly in your work. This list includes books, articles, videos, websites, and any other materials you used to gather information. Here's why it's important:

- **Verification:** It lets anyone who reads your work find your sources to learn more or check the facts.
- **Acknowledgement:** It shows respect and gives proper credit to the creators of the ideas and information you used.
- **Resource Sharing:** It helps others who are interested in your topic find useful resources.

Guidelines for Listing Sources in Your Bibliography

Ensure that your bibliography supports the citation system used within your project, whether it is footnotes, endnotes, parenthetical references, or another citation style.

1. **Books:**
   - » **Format:** Author(s), year, title of book, edition, publisher, page number.
   - » **Example:** Coghill, Graham (1985). Sciencescope 2. Heinemann Education Australia, p. 167.
2. **Journal Articles and Other Articles:**
   - » **Format:** Author(s), article title, journal/source name, publication date, edition (if applicable), page numbers.
   - » **Example:** Lemonick, Michael. "Are We Ready for Fat-Free Fat?" TIME, January 22, 1996, pp. 40-46.
3. **Websites:**
   - » **Format:**
     - Name of the article or source.
     - Date the article was published or last updated (if available).
     - URL address.
     - Date and time you accessed the site.
   - » **Example:** NASA Ozone Watch. 'Facts about Ozone'. Updated October 18, 2018. https://ozonewatch.gsfc.nasa.gov/facts/ozone_SH.html. Accessed January 6, 2022, 6:08 PM.
4. **Use of AI:**
   - » Use of AI is allowed as an assistance tool, not a creator, unless otherwise staated in the section guide of this handbook, and must be cited. See the STS Resources page for full guidelines.
   - » **Format:**
     - Name of AI Tool used.
     - Where it was used.
     - Command prompts used.
     - Acknowledgement of review.
     - Date and time you accessed the tools.
   - » **Example:** Chat GPT were used to [eg. brainstorm project ideas / summarise research / assist with editing] using the following commands [insert commands]. All content has been reviewed and adapted to reflect my/our own understanding and original work. Accessed January 6, 2022, 6:08 PM.

Acknowledgements

Include a section in your project where you thank those who provided guidance or assistance. Outline specifically how each person contributed to your project.

HOW TO NAME YOUR FILE AND CREATE A RISK ASSESSMENT

File Naming Guidelines

Proper file naming is crucial for organising and identifying your project documents and media files effectively. It ensures that your submissions are easily accessible and recognisable to judges and STS staff, minimising confusion and preventing file misplacement. Consistent file naming helps maintain the integrity of the STS evaluation process, enabling a smooth review and archival of all entries.

How to Name Your Files

1. **Project Files:** These files include your main project such as your written report, photography presentation, game, video production etc. or any supporting documents specific to the main project.

   Naming Convention: Reflect the participant's name, title of the project, entry code and document type (ie: Facesheet). Use underscores to separate different elements to enhance readability and ensure electronic compatibility.

   - **Individual Entry:** `Sectioncode_Divisioncode_SurnameFirstname_Entrycode_Document`
   - **Example:** `W_M_SmithJohn_1-2354_FaceSheet`
   - **Group Entry:** `Sectioncode_Divisioncode_SurnameFirstname_SurnameFirstname_Entrycode_Document`
   - **Example:** `W_M_SmithJohn_WangMark_2-2354_Report`

2. **Distinguishing Between Documents:** To clearly distinguish between your written report and other supporting documents, include a clear label in the file name such as '_Oral_Presentation' for the oral presentation. This labeling ensures that each component of your submission is easily identifiable at a glance, which makes for a more organised review process by the judges.

   - **Example:** `Sectioncode_Divisioncode_SurnameFirstname_Entrycode_Oral_Presentation`
   - **Document Types:** `Report, FaceSheet, Appendix, LogBook, etc.`

3. **Oral Presentation Video:** This file is the video component where you orally present and explain your project. It serves as a dynamic supplement to your written materials, offering a visual and auditory explanation of your work. The file must be sumitted in .mp4 format or an external link provided where the file can be downloaded ie: Google Drive, One Drive. Please note that Vimeo and other video hosting services are not allowed.

   Naming Convention: Follow as above.

Avoid Special Characters: Do not use apostrophes, spaces, or special characters in file names. Stick to letters, numbers, and underscores. This prevents issues related to software compatibility, especially across different operating systems which may not recognise certain characters.

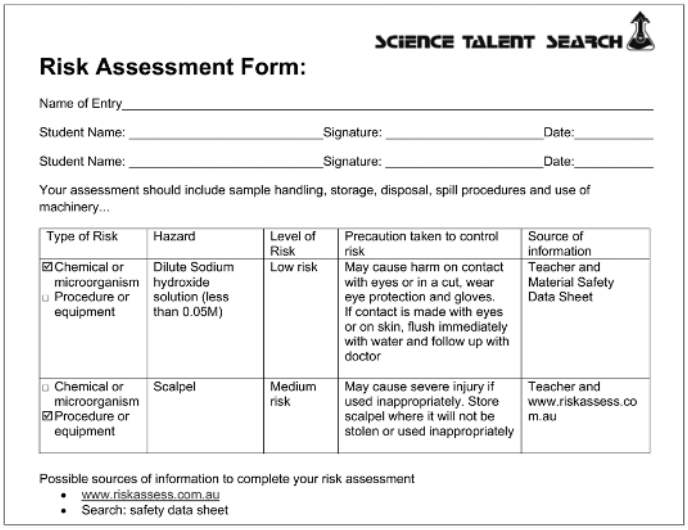
Importance of Risk Assessment

Risk assessment is a crucial part of any project, especially when it involves practical experiments or physical models. It helps ensure that all potential hazards associated with your project are identified, evaluated, and mitigated effectively to maintain safety during its execution and display.

Many sections of the competition require a completed risk assessment to ensure that participants have considered and addressed all safety concerns.

Check the specific guidelines for your section to determine if a Risk Assessment Form is needed. You can access it form STS website or download the **Risk Assessment Form** here to ensure your project complies with all safety requirements and to aid in the safe planning and execution of your work.

Example of filled out Risk Assessment Form:



SCIENCE TALENT SEARCH

Risk Assessment Form:

Name of Entry_____

Student Name: _____ Signature: _____ Date:_____

Student Name: _____ Signature: _____ Date:_____

Your assessment should include sample handling, storage, disposal, spill procedures and use of machinery...

Type of Risk	Hazard	Level of Risk	Precaution taken to control risk	Source of information
☑ Chemical or microorganism ☐ Procedure or equipment	Dilute Sodium hydroxide solution (less than 0.05M)	Low risk	May cause harm on contact with eyes or in a cut, wear eye protection and gloves. If contact is made with eyes or on skin, flush immediately with water and follow up with doctor	Teacher and Material Safety Data Sheet
☐ Chemical or microorganism ☑ Procedure or equipment	Scalpel	Medium risk	May cause severe injury if used inappropriately. Store scalpel where it will not be stolen or used inappropriately	Teacher and www.riskassess.com.au

Possible sources of information to complete your risk assessment

- www.riskassess.com.au
- Search: safety data sheet

DOCUMENTATION CRITERIA BY SECTION – OVERVIEW

The table below provides an overview of submission requirements for all sections of the STS competition. It details the necessary components for each section, including the type of submissions required (such as written reports, creative pieces, or videos), specific word count or time limits and the file formats accepted. Note that the word count specified for each project does not include the Bibliography, Acknowledgements, Appendix, or any other attachments e.g., logbook.

Each electronic submission must be accompanied by a fully completed Entry Face Sheet, submitted as a separate PDF document. You may print, manually fill out, and sign the form before scanning it for electronic submission, or you can fill out and sign it electronically.

Computer programs must be hosted by students online and be directly accessible without a password.

Section	Submit Electronically via STS Schools Portal	Word Count/Time	File Format
Computer Programs	1. Written Report 2. Oral Presentation Video	Report: 500-1000 words Video: 8-10min	Report: PDF Video: MP4
Creative Writing	1. Creative Piece	500-1000 words	PDF
Creative Writing – Picture Story Books	1. Creative Piece	Lower Primary: up to 200 words Middle Primary: 100-300 words	PDF
Experimental Research	1. Experimental Research Report 2. Oral Presentation Video	Report: no limit Video: 3-5 min	Report: PDF Video: MP4
Experimental Research – Class Project	1. Experimental Research Report 2. Evidence of Class Involvement 3. Oral Presentation Video	Report: no limit Evidence: no limit Video: 5-10 min	Report: PDF Evidence: PDF or MP4 Video: MP4
Games	1. Written Report 2. Oral Presentation Video	Report: 500-1000 words Video: 3-5 min	Report: PDF Video: MP4
Inventions	1. Written Report 2. Oral Presentation Video	Report: Max 1000 words Video: 3-5 min	Report: PDF Video: MP4
Science Photography	1. Digital Image Presentation 2. Written Report 3. Oral Presentation Video	Slide Show: 3-6 images Report: 500-1000 words Video: 1-5 min	Slide Show: PDF Report: PDF Video: MP4
Scientific Posters	1. Digital Poster 2. Oral Presentation Video	Poster: 500 words Video: 3-5 min	Poster: PDF Video: MP4
Video Productions	1. Video Production 2. Oral Presentation Video	Video 1: Max 5 min Video 2: 3-5 min	Videos: MP4
Working Models	1. Written Report 2. Oral Presentation Video	Report: Max 1000 words Video: 3-5 min	Report: PDF Video: MP4

VIRTUAL SHOWCASE

The Virtual Awards Showcase is a curated selection of bursary winners, carefully chosen from each subject and division, to be displayed virtually on the STS website.

While not every winner can be featured on the website, Bursary winners should expect the possibility of their projects and associated videos to be displayed for a minimum of 1 year period on the STS Awards Showcase website.

With the launch of the webpage, we will announce the School Awards for 2026 including:
- The Peter Craig School Awards; and
- The Hugh McKinight Encouragement School Awards.
- The Dr. Robert Roe Volunteer Service Award.

The 2026 Awards Showcase is scheduled to go live on Tuesday, 10 November.

2025 STS Awards Showcase

The 2025 Awards Showcase is currently live. Explore selected examples of our bursary-winning entries across all divisions and sections and understand the impressive standards of work required to reach award level.

What Happens Next?

Having seen how you can benefit from STS, we hope that you will start to plan another entry for 2027. Perhaps you will have gained some new ideas from seeing the work of others and from talking to prize winners from other schools.

2025 STS MGMT, COMMITTEE & ASSISTANTS:

We extend our gratitude to the dedicated team of managers, committee members, and assistants whose hard work and expertise help make the 2025 Science Talent Search a success.

STS Committee 2025

Amelia Strzebonski	Roxburgh College
Ann Pisarevsky	Science Educator
Catherine Bellair	Thomas Carr College
Dilan Abeyaratne	Brunswick Secondary College
Elizabeth Piacquadio	Loreto Mandeville Hall Toorak
Farah Deeba	Al-Taqwa College
Jamie Astill	Sirius College
Janice Teng	Science Educator
Janice Youl	Retired Teacher
Jason Smith	Assumption College
Jennifer Cutri	Swinburne University
Josie Crisara	Aitken College
Kylee Townsend	Hazel Glen College
Leonie Lang	Retired Teacher
Lynden Fielding	Preshil College
Marisa Jarvis	Hume Anglican Grammar
Maureen Frith	Science Educator
Mehar Saeed	Minaret College
Michaela Patel	Caulfield South Primary School
Raquella Neiger	Science Educator
Rebecca Hann	Berwick College
Rosina Tassone	Ave Maria College
Sarah Shatford	Hume Anglican Grammar
Veena Nair	Viewbank College

STS Management

Alexandra Abela	STAV president
Farah Deeba	Al-Taqwa College
Janice Teng	Science Educator
Jirana Craven	STAV
Josie Crisara	Aitken College
Leonie Lang	Science Educator
Loretta Agius	STAV

STS Assistants

Auzi Amazia	STAV Membership and Comms
Charmaine Pienaar	STAV Accounts
David Trotter	STS Database
Jirana Craven	STAV Events & Projects
Kushla Ross	Studio Cahoots
Loretta Agius	STAV Events & Projects
Sue Elliott	STAV Accounts

A SPECIAL THANK YOU!

We extend our sincere thanks to the following organisations for their generous donations and contributions, without whom, this competition would not be possible:

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SBMB AUSTRALIAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY

ACU AUSTRALIAN CATHOLIC UNIVERSITY

WEHI brighter together

IET The Institution of Engineering and Technology

The Field Naturalists Club of Victoria Est. 1880

Entomological Society of Victoria

Cyril Callister FOUNDATION

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