

# Holy Rosary Science Fair 2026

Dear Families,

We are pleased to share that Holy Rosary will once again host our beloved whole-school Science Fair, proudly aligning with National Science Week from 15-23 August! Every student from Prep to Year 6 is encouraged to participate by submitting a project that reflects their own scientific curiosity and creativity.

Since its inception in 2017, the Holy Rosary Science Fair has blossomed into a celebrated community event, showcasing the dedication of our students and the invaluable support of families. This year's Fair will be held in our school hall on **Friday 21 August**, from **8:30 - 9:15am** and **3:00 pm to 4:00 pm**, and we can hardly wait to see the innovative ideas and projects our students will present. All projects should be submitted by **Thursday 20 August**, 9am in the hall and we'll take care of the rest. Expressions of interest should be submitted to the school office by using the form at the end of this information pack by **24 July 2025**. Additional forms are available in the school office.

A science fair project is an opportunity for students to dive deeply into an area of science that fascinates them, to apply the methods of scientific inquiry, and to share their discoveries with our school community. Encourage your child to begin by reflecting on their own interests, whether it's the ecology of local wildlife, the physics of sports, or the chemistry of cooking.

Although National Science Week's theme this year is "Seeds of science: Nurturing knowledge for all", students are welcome to explore any scientific domain that excites them. Whether they choose to investigate astronomy, environmental science, robotics, or health sciences, what matters most is their passion!

The primary aim of the Science Fair is for students to teach others about a scientific concept they have either mastered or are eager to learn. To help them succeed, students should first pinpoint the core scientific principle their project will explore, then select from one of our designated categories—such as Experimental Inquiry, Model Construction, or STEM Innovations—that best highlights their topic.

All participants will receive a Holy Rosary Science Fair certificate in recognition of their hard work and enthusiasm.

At home, students should research their chosen topic using credible sources and explain their findings or knowledge in a written format. Presentation is key: a clear, well-organised display often makes complex ideas more accessible and engaging.

## Tips for a Successful Science Fair Project

- **Choose a Topic of Interest:** Select a project that genuinely intrigues you to maintain motivation.
- **Plan and Research:** Gather information from credible sources and plan your model carefully.
- **Document the Process:** Keep a journal of your hypothesis, experiments, observations, and conclusions.
- **Decide on your presentation** as listed below
- **Practise Your Presentation:** Rehearse explaining your project clearly and confidently.

Once projects are complete, students will have the opportunity to present to their peers and teachers during the Science Fair exhibition. This is an invaluable chance to bolster their communication skills, celebrate their scientific journey, and inspire others to view science as an exciting, creative endeavour.

We encourage families to embark on this learning adventure together—whether it's brainstorming project ideas, gathering materials, or simply discussing scientific concepts over dinner. If you have any questions or need guidance, please reach out to Maria, Sarah, Michaela or Antoinette. They are eager to support you and your child with their project.

Thank you for fostering a love of science and discovery in our students. Together, let's make this year's Science Fair our most inspiring celebration yet!

Students wishing to participate in this year's Science Fair should fill in an entry form (attached below and also available at the office) and return it to their class teacher. Science fair projects are a home based project and are to be completed at home. Therefore, parental guidance and supervision will be required.

Warm regards,

Holy Rosary Staff

Projects may be presented in many ways. Students may like to try one of these or come up with an idea of their own.

### Photography

Photos which record a scientific event, sequence or illustrate some scientific principle. Phenomenons such as an object melting, different types of clouds, a flower, crystals growing, animal or plant survival, light, life cycles, chemical or physical change (like an object rusting), a bud opening or a tree changing throughout autumn.

### Working Models

Working models may be either a **scale mode** or an **information model**. Working models **must have some working parts**.

**A scale model** is a scaled working model of an existing device that simulates the operation of, and the scientific principles behind, an existing technology. For example, a scale model of a wind turbine, a periscope, a working well, a mechanical arm, a rubber band powered car, a hydroelectric power station, an electromagnetic train, generating electricity, motion sensor, an aquatic machine, a record player.

**An Information model** demonstrates a scientific principle or concept or simulates a scientific technique. These models educate people about the concept being illustrated. For example, if you wanted to show how electrons flow through wire you couldn't use electrons (because they are too small) but you would use something large enough to represent electrons.

### Inventions

Inventions are working models with original applications of technology that solve a problem. The scope for inventions is only limited by your imagination. You apply your knowledge of science to make a working invention that has a practical application. Examples from other science fairs include a device to separate and sort marbles into different sizes, a system to make best use of grey water from the kitchen or laundry, a turbine on a garden hose to create a torch to see when watering at night, bike safety rear vision, and a light up violin.

### Games

Students produce a game which teaches a scientific idea while playing the game. It could be a board game or a card game but it is not limited to these. For example a game based on recycling or endangered animals, climate change, natural resources, sustainability, ecosystems, the life cycle or air quality. Games, which are

original and creative and aren't just a copy or adaptation of a commercially available game, will be more successful.

### **Computer Programs and Simulations**

The creation of an interactive game, simulation or presentation (or a combination of these) on a computer. It must illustrate a scientific concept. The program script or language may be varied - including HTML, VB, Net, Scratch, Game Maker, Unity, Python and for the young, Prezzi, Powtoon or PowerPoint. **NOTE: Interaction, input and reaction is required.**

### **Experimental Research**

Choose a topic that interests you where you can conduct an experiment or set of experiments to test a hypothesis. Preferably it should be one that gives you the opportunity to learn something that you did not already know. You will ask questions like why? What if? How? Examples include, what is the effect of feeding plants different nutrients?, growing plants in different medium or different light scenarios, investigating the insulation properties of different materials, the effect of wheel size on speed, can exercise improve memory? Which citrus fruit is a better battery? See attached sheet for further ideas for experimental research projects.

### **Poster (scientific wallchart)**

Students produce bright appealing posters that include at least three relevant, hand drawn or computer generated pictures. Written information may be typed or handwritten and legible from one metre. For STS, posters can be no larger than 80cmx60cm or smaller than 60cm x 40cm.

### **(DVD)**

Students produce a video that teaches others a scientific concept. It should focus on areas of science where motion, colour and sound are important. Choose a topic that you are interested in and think of interesting ways of showing or demonstrating the scientific principles and ideas to others. Judges are looking for creativity with location (get out and about to film your movie) and effective editing techniques. Videos filmed with the student sitting in one spot in front of the camera without moving around won't score as well. Be creative.

### **Creative Writing (Picture Story Book)**

A picture story book which incorporates science ideas into the story with your original illustrations that help tell the story. Think along the lines of *The Hungry Caterpillar*. Your story should include at least five key science ideas. A variety of different techniques could be used, including but not limited to; pencils, watercolours, pastels and collage. You could look at lots of different illustrations in picture story books at the library for inspiration.

**Finished projects are due on Thursday 20 August and should be brought to our school hall. The projects will be displayed for viewing on 21 August.**

## Ideas for projects

The hardest part of the whole project is picking your topic. There are some terrific ideas on the internet. Try googling science fair project ideas or working model science fair projects. Here are some ideas for the experimental research category to get you started. Even if you don't like any, they may inspire you to come up with one of your own. Remember, check all project ideas with your teacher and parents, and don't attempt any project that would hurt or scare people or animals. Good luck!

### **SCIENCE FAIR IDEA STARTERS FOR EXPERIMENTAL RESEARCH**

#### **Biology & Health**

- How does sleep affect reaction time?
- Do plants grow better with music or silence?
- What conditions cause mold to grow fastest?

#### **Physics & Engineering**

- What design makes the strongest bridge?
- Which paper airplane design flies the farthest?
- Can you build a simple electric motor?

#### **Environmental Science**

- Which type of soil filters water most effectively?
- How does pollution affect plant growth?
- What materials are best for insulation (keeping heat in/out)?
- Can solar energy be used to cook food efficiently?

#### **Technology & Coding**

- Can you create a basic app or game that solves a problem?
- How does screen time affect concentration?
- Build a smart irrigation system using sensors.

#### **Chemistry**

- What is the best pH for plant growth?
- How do different liquids affect tooth enamel (using eggshells)?
- How does temperature affect the rate of chemical reaction?

#### **Fun & Unique Ideas**

- Can you design a roller coaster model that maximises speed safely?
- How does background noise influence learning?
- Can you build a water-powered rocket?
- What makes the perfect slime?

Remember, find something that interests you, and have fun with it. If you are still having trouble finding a topic there are plenty of ideas on websites such as <https://sciencebob.com/>

# Holy Rosary Science Fair 2026

++Print your own or hard copies will be kept in the office++

Name: \_\_\_\_\_ Year Level and Grade: \_\_\_\_\_

## MyProject is: (Check One)

<input type="checkbox"/>	A Scientific Method Project - I love to experiment!
<input type="checkbox"/>	An Engineering Design Process - I'm Excited To Get Building!
<input type="checkbox"/>	A Research Paper - Writing Research Papers Is Awesome. They help me learn so many cool things!
<input type="checkbox"/>	An Infographic Display -I can't wait to share learning in a bright And colorful way!
<input type="checkbox"/>	An invention - I'm an inventor
<input type="checkbox"/>	A picture book - I'm an author
<input type="checkbox"/>	A computer program - I'm a programer
<input type="checkbox"/>	A Video Production - I'm a videographer
<input type="checkbox"/>	A working model - I'm a creator
<input type="checkbox"/>	Design Your Own Project - I like to think outside the box!

**Required:** My Proposed Project Title is:

\_\_\_\_\_

**Required:** Description:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I have reviewed the Science Fair information with my child, \_\_\_\_\_(NAME), and we understand the requirements for a successful Science Fair Project. I also agree to assist my child in completing each part of the project in a timely manner.

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_