

JUNIOR SCIENCE PROGRAM

MC students
receive a
10% DISCOUNT
when registering
with a non-MC
friend!

DATES: Monday 15th - Thursday 18th April

TIME: 9am – 3pm daily

LOCATION: Macquarie College
Lake Road, Elmore Vale

AGES: 8-9 year olds

INCLUSIONS: All materials to participate in the
daily Junior Science Program

A gift and a Certificate of
Completion for each participant

Lunch and a Snack supplied
by our Canteen

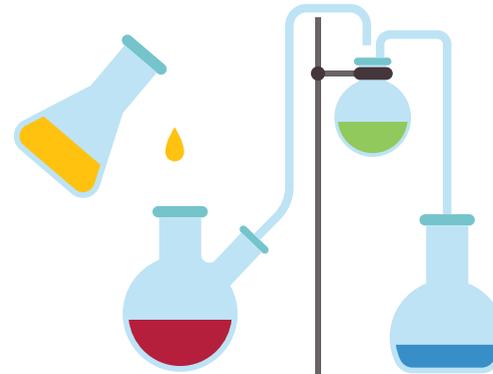
PRICE: Single Day Program
(per child) \$60.00

CONTACT: Macquarie College Reception
phone 02 4954 6222

REGISTER: macquariecollege.nsw.edu.au/camps/



MACQUARIE COLLEGE



STEM

@ **MACQUARIE COLLEGE**

HOLIDAY CAMPS

for 8-9 year olds

**15-18 APRIL
2019**

JUNIOR SCIENCE PROGRAM



MACQUARIE COLLEGE

You're invited to STEM @ MC Holiday Camp Junior Science Program! We're thrilled to welcome you to the Macquarie College science labs for a week of fun activities for boys and girls in 8-9 years old interested in all scientific things! Junior Science Program participants will learn how to be an ace communicator, work together in teams, tackle new problems, and collaborate to find solutions to fun science-based challenges.

The daily program delivers learning outcomes aligned with the NSW Primary School syllabus. The integration of Science, Technology, Engineering and Mathematics (STEM) is shaping 21st Century learning, and students are being taught how to learn through inquiry-based processes. Science is a fantastic subject centred around inquiry, exploration, prediction, adjusting expectations, and forecasting outcomes.

All Junior Science Program activities are fully supervised by experienced Macquarie College Teaching and Support Staff. We will ensure every child participates fully in the wide range of activities, and works purposefully as an individual and within small groups to achieve the desired outcomes each day.

MEET OUR JUNIOR SCIENCE PROGRAM PRESENTER

Hi! I'm Tessa and I can't wait to host the 2019 STEM @MC Science Camp!

I love STEM because it shows junior scientists that Science and everyday life cannot, and should not, be separated. STEM principles allow youngsters to explore the world around them, master new skills in a creative way, and find real-world solutions to common problems ... through science!

My Science hero is the irrepressible Sir David Attenborough OM CH CVO CBE FRS FLS FZS FSA FRSGS ... no, that's not a typo, those letters represent all of the qualifications and special honours which David has earned over the past 60 years as a broadcaster and natural historian.

David is my hero because he has a great ability to immerse himself into the natural world and explore every intricacy of the living world, he has a tremendous sense of adventure and is continually exploring! My interests include exploring the living world, problem solving, working with peers to achieve a goal and playing sports like basketball and touch football.

I have previously been a teacher at Macquarie College before I pressed the pause button on full-time teaching to care for my young, busy family. I have two sets of twins - Avery & Harlow (4) and James and Finn (2). I am loving being a mum and guiding my children in activities which push them to ask questions, explore further, understand and also to create.

I decided to go into teaching as I love to understand the world around me. Life is amazing and interesting! I want others around me to be able to see that too. The biggest kick I get out of teaching is when students have their own 'A-ha' moment, mastering their own learning.

So join me for our daily program of STEM activities where we will design, create, take chances, make mistakes and get messy, at the STEM @MC Holiday Camps.

Mrs Tessa Greive

BA Science (Biology Major Chemistry Minor) / BA Teaching



Mrs Tessa Greive



MONDAY

Students will be exploring the states of matter experimenting with **SLIME!** Students will start by making Oobleck and identifying its properties. Students will then work together to make the Oobleck 'dance'. The Students will then design and perform a scientific investigation to determine the best chemical composition for the stretchiest Slime. The students will end their day with a task to engineer a scoop to assist in cleaning up a slimy algae bloom which is threatening a local waterway.



TUESDAY

Today's activities will require the students to mastermind answers for the Superheroes Engineering Department. They will be utilising problem solving skills and follow the **engineering process** to design, develop, test and evaluate their prototypes. They will create a getaway glider paper aeroplane, that can complete different challenges. Assist in designing and constructing the parachute with the longest landing. Participants will end their day by improving on Spiderman's web design.



WEDNESDAY

On this day students will explore water and some basic properties of chemicals. Students will explore the basic properties of water and oil and using the foundations of **Biology**, explore the challenges faced when cleaning an oil spill, a natural and environmental disaster! Students will explore the world of pH and look at the different chemical and their pHs. Students will complete the day by using simple programming to get Sphero balls swimming. They will then be challenged to design and test different "swimsuits" for their Sphero balls to improve their lap times.



THURSDAY

It's an Easter Engineering Extravaganza! Students will utilize the **engineering process** to design, build, test and evaluate their easter STEM prototypes. Firstly, students will be designing and building a basket to carry easter eggs. Then they will put their baskets to the test with an obstacle course relay. In the second session students will work in groups to design a catapult to launch a chick. They will need to test their catapult and use evaluation to problem solve and modify their catapult before a whole class chick-launching competition. In the last session, students have been recruited by the Easter bunny to help with an easter egg drop. Using basic equipment and specific dimensions, students will need to design and create an egg container that can withstand a drastic drop.



Each day students will learn, and develop, capabilities to question, explore, problem-solve, communicate, collaborate and work together to complete the activities, continually evaluating their resources, their work and expected or actual outcomes.