CO2 DRAGSTERS

Overview: The CO2 Dragsters Program provides students a means to demonstrate their ability to use Design Make Appraise (DMA) principles to design, draw and then build a dragster within a set of specifications. Students are encouraged to research design features that will make their vehicle more efficient. Their cars are then tested on a 20 metre track for speed to determine the fastest dragster.

ACARA Links: Critique needs or opportunities for designing and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas, ACTDEP035.

Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions, ACTDEP037.

ORGANISATION

Year 5 students will attend Sarina State High School four half days over four fortnights in Term 4 of Year 5 and then will return in Term 1 and 2 of Year 6 in 2024.

Term 4 2023 -
Wednesdays 8.45 am—11.30 am
Term 4 - Week 2 ~ 11th October
Term 4 - Week 4 ~ 25th October
Term 4 - Week 6 ~ 8th November
Term 4 - Week 8 ~ 22nd November
Term 1 2024 - TBA

APPLICATION PROCESS

To be considered for the SEI, students will be required to complete an application form which will expect students to:

⇒ Outline their latest report card results

⇒ Attendance percentage

⇒ Meet specific criteria

⇒ Complete a written short response

⇒ Preference programs 1 - 3

⇒ Have Principal and Parent/Carer Approval

Sarina Erudite Initiative

RATIONALE

The Sarina Erudite Initiative (SEI) is an enrichment program aiming to expose primary school students to the secondary curriculum and extend students above and beyond the primary curriculum, thus allowing them to develop further interests and skills and enrich their lives.

According to the Department of Education and Training – Students who are high performing *'are entitled to a curriculum provided at the pace, degree of abstraction and complexity and level that is consistent with their abilities – enabling them to become confident, independent learners who achieve to their potential.'* The Sarina Erudite Initiative aims to cater for these students alongside the curriculum they are exposed to at their Primary School.

Sarina Erudite Initiate Programs will be linked to the areas of Humanities, STEM, Digital Technologies and Health and Physical Education, with a strong link to both literacy and numeracy. The SEI Programs will also align to ACARA General Capabilities and Achievement Standards.

INITIATIVE PROGRAMS

Criteria:

⇒ Students should be able to demonstrate an high level of literacy and numeracy.
⇒ Achieve a 'C Standard' or above in all core subjects.
⇒ Display excellent behaviour and effort in all educational pursuits.
⇒ Ability to engage in self-directed autonomous learning.

Students can choose from the following programs:

Please note: The Sarina Erudite Initiative is capped and students who do not meet the criteria may not be successful.

STEM DEVICES

Overview: Students will design and develop a solution that can be printed using a 3D printer plus have the opportunity to program a route around an obstacle course using flying drones. <u>Please bring a device (preferably an Ipad) if you have your own.</u>

ACARA Links: Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition), ACTDIP019.

Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols, ACTDIP022.

HEALTH AND PHYSICAL EDUCATION

Overview: Students will be exposed to key theoretical and practical concepts as outlined below:

Theoretical *(70 mins)*	Practical *(70 mins)*
Nutrition Nuts *Energy in Vs Energy Out*	Invasion Games
Nutrition Nuts *Nutritious Snacks*	Striking & Fielding
Nutrition Nuts *Food for Growth*	Volleyball (Newcomb Ball)
Nutrition Nuts *Healthy Choices*	Touch Football

ACARA Links: Participate in physical activities that develop health-related and skill-related fitness components, ACPMP083.

Practice, apply and transfer movement concepts and strategies with and without equipment, ACPMP082.

ENCHANTING EGYPTIANS

Overview: Students will inquire into the enchanting lives of the Ancient Egyptians, hypothesising and synthesising pyramids, mummies and popular personalities.

ACARA Links: Identify a range of questions about the past to inform a historical Inquiry, ACHHS207.

Significant beliefs, values and practices of the Ancient Egyptians including everyday life and death and funerary practices, ACDSEH033.