

# He nui te akoranga ki Waterlea Great learning happens at Waterlea

Hello, Kia Ora, Kia Orana, Bonjour, Talofa Lava, Taloha Ni, Bula Vinaka, Ni Hau, Namaste, Malo e Lelei, Deea awit, Sagutom, Fakalofa Lahi Atu, Dia daoibh, Sillaw, Huan Ying, Hola, Konichiwa, Guten Tag, Здравствуйте

# Newsletter 26 July 2023

Important Dates	
31 July	Cook Island Language Week
1 August	Boys Interschool Soccer
3 August	Girls Interschool Soccer
4 August	Cohort Entry Visit 1
4 August	MANA School Assembly 12:15pm
11 August	Cohort Entry Visit 2
14 August	Board of Trustees Hui 7pm - 9pm
18 August	Cohort Entry Visit 3
18 August	MANA School Assembly 12:15pm
21 August	New Entrant Cohort Starts
31 August	SLC's 1pm - 7:30pm
4 September	Tongan Language Week
8 September	Cohort Entry Visit 1
11 September	Te Reo Maori Language Week
15 September	Cohort Entry Visit 2
19 September	Photo Life - Class & Individual Photos
22 September	Cohort Entry Visit 3
22 September	- Term 3 Ends
9 October - Term 4 Begins	

**New Entrant Cohort Starts** 

Fijian Language Week

15 December - Last Day of School 2023

9 October

9 October

#### Kia ora

We hope you are all keeping well, dry and warm during these rather dreary winter days we are experiencing right now. Due to the rain it might pay to pop some extra clothes into your child's bag if they enjoy playing on the field or in puddles. Also, some of our tamariki and kaiako are getting some nasty flu and colds at the moment so if your child is sick, please keep them home. In this week's newsletter the senior school are sharing with you some of the science learning that they were involved in towards the end of the term involving Newton's Law of Gravity, building and launching rockets!



Waterlea is a smoke free and vape free environment

At the start of each term it is a good idea to remind everyone in the community that by law, Waterlea is a smokefree and vapefree environment. If you are coming to school or utilising the school grounds after hours, please be mindful of this. We have noticed that some of our senior school students have developed a curiosity around vaping in particular.

When discarded vapes are left on the school grounds, it does provide opportunities for our tamariki to explore things that are not good for their health and wellbeing. Vapes, with their cool colours and flavours, appear harmless but contain nicotine which is not good for developing bodies and brains. Thanks for your consideration and support in this.

## Senior School Wonder Project

In term 2, the senior school were learning about Newton's laws of motion and exploring this in the context of STEM through rocket design and engineering - aligned to Level 3 of the New Zealand Curriculum. The tamariki worked through the scientific inquiry process to test and adjust their designs in order to increase performance. This was an opportunity to show all of their MANA values when working in groups and negotiating challenges. Akonga used their experiences to link to other curriculum areas such as report writing and data collection.

Waterlea was lucky enough to have a Wonder Project ambassador from Air New Zealand who came in to support the tamariki in their design and testing and also give some insight into possible STEM career pathways.



# The Great Rocket Project

By Anna Berryman

When we first started the great rocket project, we practised by launching 1.5

litre drink bottles with water in them. To launch the rockets we needed to measure the water and pump the air into the bottle with a bike pump. And then we pulled the trigger! BANG! The limit we could use was 60PSI, which is a measurement of air pressure. We also had to record how much water, PSI and how far it went. That data would help us decide how much water to put in on the great launch.

Next, we needed to learn Newton's three laws of motion and drag, thrust, weight and something else. All the data would help us understand how the rocket would move through the air. Then we put our brain to work trying to think of the coolest and most streamline design. We stuck our wings on with super glue like, we had to hold it in place for ages, while it dried. After that we designed our rockets with pictures of animals and taped them on.

But sadly Abigail and I were away when they did the great launch. My team told me it flew high and long into the field, over 50 metres away. I saw the video and felt proud of our rocket launch.



# **BOTTLE ROCKETS**

Bottle rockets take time and passion. Assemble a team of friends or nerds and start your rocket but first read this.

Get your teacher to assemble the rocket launcher.

#### **Parts**

## What you will need:

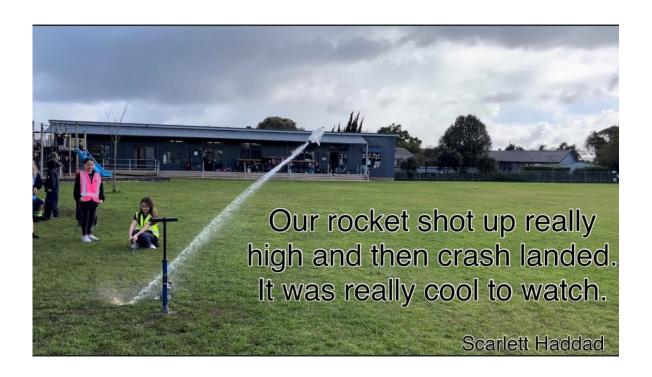
- 1. 1.5 litre bottle (fizzy drink)
- 2. Duct tape (to tape the nose cone on or you can use glue)
- 3. Fins (you can use ice cream containers)
- 4. Nose cone (from a 1.5 litre bottle or a 2 litre bottle)
- 5. Glue (to glue the fins on)

### Steps to make your bottle rocket:

- Step 1. Get two fizzy drink bottles and cut out the nose cone from the top of the second bottle.
- Step 2. Cut out the fins from an ice cream container.
- Step 3. Add the nose cone to the bottom of the first bottle with glue or duct tape.
- Step 4. Glue the fins on near the bottom of the rocket.
- Step 5. Do some drawings on your rocket and get ready to BLAST OFF!!!!!

### By Ben Rickerby





# Rocket challenge

The first thing we did towards the rocket challenge was voting who we wanted in our group. After Mr Matthews organised the groups (I was in a group with Olivia, Anna and Abigail) we started designing our rockets in our sketchbooks. But right before that we learnt about Newton's law and about drag, thrust weight and levet. One other thing we learnt about how much psi and water to put in.

We tried out some simple bottles to find out what shape our rocket fins needed to be. We were also allowed to have a name for our group the name my group chose was the tiger cubs. The shape we chose for our fin is a diamond, because our prediction is that it will help it being thrust into the air. Me and Olivia decorated our rocket with paw parents and other cute things all of which helped us launch them. The day of the big launch happened on a perfect sunny weather. We launched our rocket when Anna and Abigail weren't here but that didn't stop us from having fun. We had to have a surgery on our rocket because one of our fins was coming off luckily we had some tape on hand to tape it in place. Our rocket went about 50 metres. I feel that everyone should have this wonderful experience. The rocket challenge was a great experience. And should be carried down generations. That was my experience with the rocket challenge. Hope you enjoyed.



Lucky Book Club Lucky Book Club Lucky Book Club Lucky Book Club

Thank you to the parents that have placed their order on this Issue of Book Club! There is still

Time to order! The last day to order is Sunday 30 July



#### Royal Oak Intermediate - Enrolments are now open

Enrolments are open for 2024 for Royal Oak Intermediate. They are hosting tours starting from next week and an Open Evening next term. Please click the link to Book your Tour: <a href="https://forms.gle/GSMveUdqFxRaUv2J9">https://forms.gle/GSMveUdqFxRaUv2J9</a>

If you would like to enrol now for 2024, please click this next link:

https://royaloakint.school.nz/enrolment-overview/



# Please **Book your tour** now

#### Term 2: School Tours

Thursday, 8 June 2023, 9:30 - 10:30 am (Week 7) Thursday, 15 June 2023 9:30 - 10:30 am (Week 8) Thursday, 22 June 9:30 - 10:30 am (Week 9) Wednesday, 28 June 9:30 - 10:30 am (Week 10)

#### Term 3: OPEN EVENING Thursday, 20th July 2023 (Term 3 Week 1)

Session 1: 4:00pm - 5:00pm Session 2: 5:30pm - 6:30pm

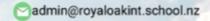
#### Term 3: School Tours

Thursday, 3 August 2023, 9:30 - 10:30 am (Week 3) Thursday, 17 August 2023, 9:30 - 10:30 am (Week 5) Thursday, 24 August 2023, 9:30 - 10:30 am (Week 6)

Together empowering, confident, motivated learners to achieve success in all walks of life



09 636 5667





https://royaloakint.school.nz/