Wonder Project Rocket Challenge

How to be an online ambassador

We understand that being physically present in a classroom may not always be a possibility for some of our Wonder Project Ambassadors. We've also got kura/schools participating in regions where ambassador numbers are low. Our priority is to make sure that every ambassador can participate in the Wonder Project safely, and that we can find a match for all our kura. That's why we offer the option to participate as an online ambassador.

What is an online ambassador?

The role of a Wonder Project Ambassador, whether online or in person, is to support a class as they work through a Wonder Project challenge and inspire rangatahi with their passion for STEM.

Our online ambassadors will inspire a class via video chat. While the challenge itself is largely hands-on, there are still plenty of teaching points you can cover on screen. Before the challenge, please pānui/read through the challenge guide. It covers your role as an ambassador, and which parts of this role can be carried out online. In the challenge guide overview tables for each module, find the 'ambassador role' section. Anything with a computer icon can be delivered online.

Pānui challenge guide

How to get started

Just like our in-person ambassadors, it's between you and your matched kaiako/teacher to decide how you spend your time in the classroom. Connect with them before the challenge and cover:

- What video chat software you'll use. We suggest Zoom, Microsoft Teams or Google Meet.
- Lesson plans.
- At what point of the lesson your volunteer time will be most valuable:
    - You might choose to be present for the first 30 minutes of each lesson to introduce the module and cover off any of the trickier STEM concepts. Then, be on call to answer any pātai/questions that might pop up throughout the lesson.
    - You could remain online for the duration of each lesson.
    - Or, you can pick and choose which parts of the challenge will require your support. We have outlined some suggestions below.

As you get to know your matched class better, you may adapt your approach to suit their learning style.

The Rocket Challenge

The Rocket Challenge is split into six modules to structure the ākonga learning journey. Most modules start with theoretical components and move into practical components later in the lesson.

How to make the most of each module online

The following lists cover the parts of each module we suggest online ambassadors focus on. Each list should take around 20 - 30 minutes to complete. This may not seem like a lot of time, but the priority is being concise and impactful. The tamariki will be so excited to meet you, however it is worth remembering that their attention spans are shorter than ours!

These suggestions are taken from the challenge guide. You are welcome to choose alternative activities to focus on – please ask your kaiako which parts of the challenge would benefit most from your support.

Module 1

- Meet the class and share your career story presentation – please ensure you are present for this.
- Run a pātai time session. We suggest a maximum of 10 pātai that ākonga have pre-decided.
- Share different STEM careers/projects that are relevant to the hapori/community your class is in. Support the explanation by sharing a video or pictures on your screen.
    - Less is more – if you're showing a video, it should be under 3 minutes. If you're showing pictures, pick 1–10.
- Ask the kaiako to email each crew's learning or photos to you. You can reply with some kupu/words of encouragement. This will enable your connection with the class to grow beyond each module.

Module 2

- Start by sharing something significant you've done at mahi this week or recently.
- Share your screen with the class and show any Module 1 mahi or pictures the class sent through. Share positive constructive comments that relate to the engineering design process for each.
    - Eg 'I love the teamwork shown in this picture' or 'I can see that you persevered in solving this problem'.
- Ask ākonga 2–3 pātai on Module 1 learnings.
- Introduce the class to the concept of variables. Provide an explanation in relation to rockets and relate it back to your own mahi if you can.
- Run another pre-decided pātai time session (we suggest a maximum of 5 pātai).
- Ask the kaiako to email you each crew's learning or photos on the practical elements of Module 2.

Module 3

- Share something significant you've done at mahi this week or recently.
- Share your screen with the class and show any Module 2 mahi or pictures the class sent through. Share positive constructive comments for each one. Try to highlight different crews than you did the week prior.

- Introduce Newton's first law to the class. Provide a few examples they'll be able to relate to.
    - Eg kicking a ball.
- Ask ākonga to discuss other examples with the person next to them. Choose people to share their answers back to you.
- Ask the kaiako to email you each crew's learning or photos on the practical elements of Module 3.

Module 4

- Share a fun fact about yourself or play two truths and lie. Your class will love learning more personal facts about their role model.
- Share your screen with the class and show any Module 3 mahi or pictures the class sent through. Share positive constructive comments for each one. Highlight different crews than you did the week prior.
- Introduce Newton's second law to the class. Discuss this in relation to the aerodynamics of their rockets without giving too much away.
- Ask ākonga what aerodynamic variables they might add to their rockets – take 3 or 4 suggestions.
- Ask the kaiako to email you each crew's learning or photos on the practical elements of Module 4.

Module 5

- Ask ākonga a 'would you rather' pātai.
    - You might like to start with a silly one, such as: Would you rather… slide down a rainbow or jump on clouds?
    - Then, progress to asking a STEM specific pātai, such as: Would you rather… study animals or lava?
- Share your screen with the class and show any Module 4 mahi or pictures the class sent through. Share positive constructive comments for each one. Highlight different crews than you did the week prior.
- Explain Newton's third law of motion. Relate this back to how rockets are launched – you may like to support this with pictures or a short video.
- Ask the kaiako to email you each crew's learning or photos on the practical elements of Module 5.

Module 6

- Conduct a 'Show and Tell' by showing the class a prop from your mahi and explaining how it works. You might like to ask them to guess what it is, if applicable.
- Get each crew to share their rocket designs with you. Provide a positive comment about your favourite aerodynamic design feature.
- Reflect on your favourite moments from across the challenge with ākonga and wish them well for their final launch!

- You may wish to send a follow-up email thanking the class and sharing one final photo of yourself in any STEM based context. Ākonga will love sharing this together as a class and be inspired by your career in STEM.

Tips for engaging ākonga over video

We know it's a lot harder to engage over video. So here are some tips to make the most of it:

- **Share your screen.** Switching it up between your face and relevant STEM content will keep the class hooked.
- **Have fun with virtual backgrounds.** Change your background before each lesson to something STEM related. You can ask ākonga to guess what it is or tell a story about it.
- **Live quiz/trivia.** Ask ākonga some pātai about the mahi they covered in the previous module.

Karawhiua!

The support of online ambassadors is just as valuable as those who are present in the classroom. Thank you for everything you do to inspire the next generation of STEM superstars.