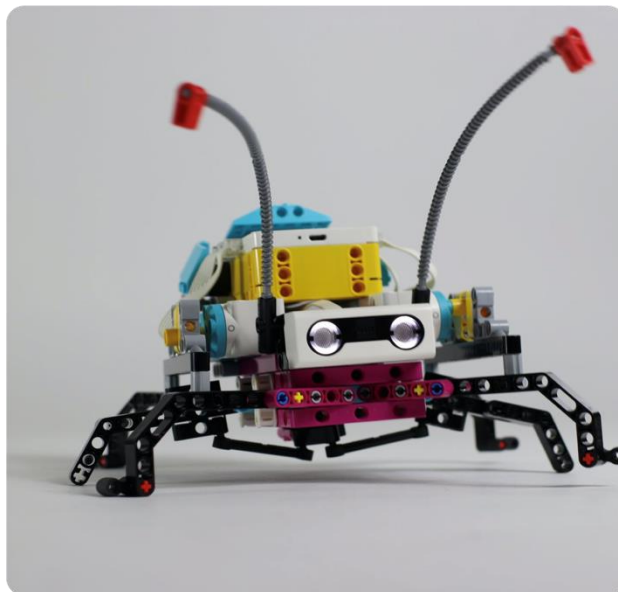# Spike Prime Competition 2024

A Virtual Competition

Term 1 and 2, 2024

Information Pack

Important Information

Key Dates	
Location	Virtual
Key Dates	Monday, February 12th - Competition Launch Registrations are due Friday, June 14th Entries are due Friday, June 28th Virtual Presentation of Awards – 7.30 pm Wednesday, July 24th *These dates are trying to account to the wide variety of public school term date in Australia.*
Registration	Online team registration at https://enter.robocupjunior.org.au/ Teams must register online by 11:59pm Friday 14th June 2024 Media Release Forms are mandatory: https://www.robocupjunior.org.au/wp-content/uploads/2021/03/RCJA_Media_Release_Deed.pdf
Entry Fee	An entry fee of $25.00 per team will be charged. Online payments are preferred and available when registering online.

Teams and Eligibility	
Eligibility	Open to all primary and secondary school students Parents and teachers are welcome to attend on the Presentation Evening.
Brief	Embark on a LEGO Time Travel Challenge! Calling all young adventurers and curious minds! Get ready for an exciting journey through time with LEGO Spike Prime! We're challenging you to build amazing creations that capture "A Moment in Time" across different eras and disciplines. Whether you're a science whiz, a history buff, or a future-thinking innovator, there's a challenge for everyone!
Team Limits	There are no 'teams per school' limits. Teams are limited to a **maximum of four members**.

Specifications	1. This needs to be your own design. You are encouraged to research and find examples of what others have already done, but your final product should be your own: not a copy of someone else's idea.
	2. You will create a Learning Journal to show evidence of:
	   a. The research you did,
	   b. How you came up with the idea for your design (try brainstorms, flowcharts, drawings, etc),

	c. Planning your design and program (justify why you made the decisions you made), d. Pictures of your build along the way, e. Anything else you want to share about your design. 3. Your robot can not be remote controlled, you should use hardware and write a program that enables it to be autonomous. 4. The robot should have features that can be found in the 'moment in time' that you are trying to create. **5.** You're absolutely welcome to decorate your robot to make it look more like what you are trying to imitate. Just make sure that you don't spend all your time on decorating and forget about the programming! **We need to see a copy of your whole code not just parts of it.** You can send it as a separate file. 6. You need to use a Spike Prime kit for the base model of your robot. You can use other Lego parts to build your robot however all sensors need to be from the Spike Prime kit or the Spike Expansion kit. 7. Don't forget to have fun and be creative!!

Submissions	This should include:
	1. a video (max 3 minutes) of you demonstrating your robot as it shows off its animalistic features.
	    a. Include a brief introduction where each team member discusses their role in the team,
	    b. A discussion about why you think you robot is a good example of your particular moment in time, did you use motors, sensors, LEGO® elements and how do they add interest?
	    c. Describe the features that you built/programmed into the robot, and why they're special
	    d. Each team member should discuss what they found the hardest, and what they enjoyed the most about this challenge.
	    e. Your robot in action. Zoom in and out to show your robot in action.
	2. A learning journal (.pdf is best) with all your supporting evidence, outlined in (2.) in the specifications. It is helpful for us if you include photos of the robot in this document so we can see how well it has been built **or** shared link to your **Google Doc/Slides/ Folder** with all your supporting evidence, outlined in (2) in the specifications. Don't forget a copy of your code. (Make sure sharing permissions are working.)

Resources	Example LEGO builds: https://bit.ly/3OwEv9f https://education.lego.com https://education.lego.com/en-us/lessons

Our Mission Statement

RoboCup Junior Australia aspires to be a popular educational activity of excellence. During the 20th century, science and technology have made exponential strides into the bettering of people's lives, but at the same time left many problems to solve. In the 21st century, it is essential that our cultures evolve in order to cater for new technologies. This is not a problem to be solved by one country or just a few engineers. All concerned people throughout the world must work on its on-going solution. By taking a fresh look at robots as an educational and entertaining medium, it is hoped that RoboCup Junior Australia will contribute to the development of 21st century society.

Our Objectives

1. To encourage young people to take an interest in scientific and technological fields, to cultivate their interest through robotic competitions through hands on creation.
2. RoboCup Junior Australia will help young people to expand their social, intellectual and problem solving skills, helping them to develop into creative and independent adults.
3. To provide a forum that will allow more people to appreciate the co-existence between science, technology and humankind.
4. To create an environment that will encourage people from all over the world to share their experience with science and technology, thereby contributing to its development.
5. To use robotics as a vehicle to foster the development of an internationally-based intellectual cooperative.
6. The emphasis will be on learning and enjoyment rather than competing to win.
7. Participants will be required to share technological developments in order to ensure the improved quality of the competition rather than allow an individual team's dominance.
8. RoboCup Junior Australia is an educational activity which will nurture understanding between different nationalities via the opportunity to compete in an educational robotics competition.
9. RoboCup Junior Australia must remain accessible to students around the world.