



# Wellington Junior Science Tournament

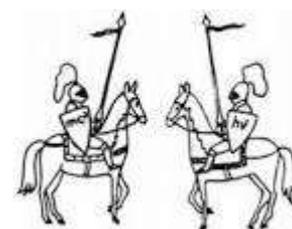
*Where? Hutt Valley High School, Lower Hutt.*

*When? **Friday, 29<sup>th</sup> November, 8.30-5.00 (approx.)***

*Who can compete? The tournament is open to teams of 2-6 students in the greater Wellington region who are in years 9 or 10. Any one school may enter up to four teams.*

*How much does it cost?*

*Entry fee includes certificates of participation, prizes and lunch.  
the cost is \$5 per participant.*



*Why?*

*This is real science: exciting, frustrating, competitive... This teaches Nature of Science and so much more. Preparing and taking part in a physics builds all the key competencies in the NoC.*

## How much work is this?

There are three open-ended problems (see next page). Students have to develop their own solutions and, at the tournament, present a solution in 10 minutes. The problems are published in October and from then on students can start work. They can (and should) get as much help as they possibly can from anyone and everyone, but in the tournament itself students have to defend their presentation in a physics fight.

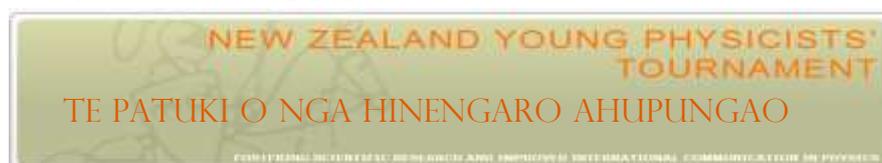
## Which tournament is this?

The WJST is an introduction to science and physics tournaments –schools may also enter Year 10 and 11 student teams in the [NZ Young Scientists' Tournament](#) which takes place in April 2020 and links to the International event in St Petersburg. Schools can also enter Year 11-13 students into the [New Zealand Young Physicists' Tournament](#) from which the New Zealand team is selected which takes part in the [International event](#).

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# The Problems for 2019

1.

## The "strength" of the Sun

UV protection is important in New Zealand, but the risk of sun damage varies depending on the season and the weather. Sometimes people forget to use sunblock and they don't realise that they are getting sunburn. How can you (safely) measure the sun's "strength". Investigate the conditions which may cause people to misjudge the "strength" of the Sun. (Each team that enters before 14<sup>th</sup> November will get with 5 free UV beads (<http://www.electroflash.co.nz/products/view/603>).

2. *Vegan Milk*

Plant based 'milk' products are very popular and there are many online recipes (e.g. <https://simpleveganblog.com/9-easy-plant-milk-recipes/>) Try out one or more recipe and investigate how plants can make a liquid that is similar to cow's milk. Explain similarities and differences.

3. *Pingpong ball*

Maximise the distance of flight for a ping-pong ball. Investigate, scientifically!

## Rules

***Rule number one:*** *enjoy doing your investigations*

*The rest of the rules* for the WJPT can be found in this [Google doc](#)

### How to apply

Please complete [this form](#) (it's a Google form, available electronically)

If you have any trouble filling out the form, contact Kerry Parker ([Kerry.parkerprice@gmail.com](mailto:Kerry.parkerprice@gmail.com)), 0211 089619.