

Thinking while Moving - Mathematics

Olympic Maths

Stage 2 Mathematics

Strand: Measurement and Geometry

Sub Strand: Length

Activity set-up

- Watch clip [100m in Olympic History](#) as a lesson hook.
- Explain learning task to students. They will be going outside to run, jump and measure to see if they could beat an Olympian from the past.
- [View photo](#) of the finish of the men's 100m race in 1928.
- Explain to students that Percy Williams from Canada won the race in 10.8 seconds.
- Ask students how fast they think they can run in 10.8 seconds?
- Show and discuss the women's [200m final](#) from the 2000 Olympics in Sydney, the men's [long jump result](#) from 1920 and the [women's high jump](#) from 1960.
- Model how to use stop watch and trundle wheel.

How to play

- Students need to work with a partner. Use '[short to tall](#)' to partner students.
- Ask student to measure and mark 10m. Inform them that when we estimate length it is always efficient to have a known distance in mind. Throughout the activity teacher to remind students to refer back to the marked 10m when estimates are inaccurate.
- In pairs students use stopwatches and trundle wheels to estimate, measure and record lengths and heights in metres and centimetres using the recording sheet as a guide. The person timing must yell go and stop, the person running/jumping marks their distance by placing a cone at their start and end position.
- Inform students that they will rotate time keeping and running/jumping each task so that each person will time keep 2 times and run/jump 2 times.
- Students collaborate with partner to record and display their data to share with classmates.

Equipment/Resources

Stop watch
Trundle wheel
Tape measure
Chalk
Cones/markers
[Recording sheet](#)

What's some of the maths

Mathematicians use what they know to estimate length and distance.
Mathematicians can talk, reason and share their thinking with others.
Mathematicians can use appropriate technology to solve problems.

Let's talk and think like mathematicians

What did you notice about the relationship between time and distance?
Were your estimations accurate? What would you do differently next time?
How can we efficiently display the data you collected today?

Suggested mathematics outcomes

MA2-9MG: measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres
MA2-1WM uses appropriate terminology to describe, and symbols to represent, mathematical ideas
MA2-3WM checks the accuracy of a statement and explains the reasoning used