

Thinking While Moving - Mathematics

Orienteering

Stage 2 mathematics

Strand: Measurement and geometry

Sub strand: Position

Activity set-up

- [Read Sport safety guidelines for orienteering](#)
- Teacher to decide on 8 landmarks/places around the school and a starting and finishing point.
- Teacher to create orienteering instructions. Follow link to view an example and to use as a template
- Place a cone/marker and a Fundamental movement activity card at each chosen school landmark/place of the course.
- Split students in pairs using '[Height order challenge](#)'

Pre-task: Students will need to be familiar with reading a map, using a compass and measuring length using a trundle wheel.

How to play

- Students begin at starting point and read first clue.
- With a partner student use compass and trundle wheel to navigate to the correct place.
- Once at the marker students complete physical activity move and record place on map using a symbol.
- Students move around the course using orienteering instructions, trundle wheel and compass.
- Students are finished when they have completed all physical activities and navigated to the finishing marker.

Increase/decrease challenge

- Students can draw their own map of school.
- Students can follow line on map from one marker to the next.

Equipment/Resources

- Tablet with compass or a compass for each group
- Map of school
- 10 Cones or markers
- [Fundamental movement activity cards](#)
- Orienteering Instruction cards
- Trundle wheel (one per pair)

What's some of the maths

Mathematicians can talk, reason and share their thinking with others.

Mathematicians can read a simple map to navigate from one point to the other.

Mathematicians can give reasons for using symbols on a map. Mathematicians can calculate distance between 2 points on a map.

Mathematicians can use N, E, S,W, NE, SE, SW and NW to indicate direction.

Let's talk and think like mathematicians

How was your and your partners thinking the same and different? What was the best strategy to complete the course? How did you use your knowledge of maps to navigate the

Suggested mathematics outcomes

MA2-1WM: uses appropriate terminology to describe, and symbols to represent, mathematical ideas

MA2-17MG: uses simple maps and grids to represent position and follow routes, including using compass directions

MA2-9MG: measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres