

The Big Wide World

Create a set of directions, which can be used to guide a follower to specific destinations.

## Options

* Draft a satellite navigation (SatNav) script to walk to another part of the school from memory and then test it out.
* Design a set of instructions that lead to a hidden treasure.
* Include travel time, for example how long it would take to run, walk or ride the journey.
* Give instructions to enable another student to conduct a school tour.
* Write a set of instructions that will help a new student find their classrooms from their locker.
* Plot an efficient path between home and school.

## Considerations

* Consider the time, distance, and mode of transport when writing directions.
* Identify known symbols for directional language e.g. N=North, FWD=forward, 90°=ninety degrees, m=metres.
* Students may work individually, with a partner or in small groups
* Consider allowing students to choose the type of course to write their sequence.
* Early finishers can follow each other's sequences (where appropriate) and see if the set of instructions make sense.
* Consider downloading a fitness app that shows time, distance and pace.
* Use Google Maps, Apple Maps or similar apps to explore scale.
* Use Google Earth (pictured) or similar apps to generate maps and indicate key locations.

Aerial View.

An aerial view of school buildings sourced from Google Earth.

## Key Questions

* What are the key features in a set of well written instructions?
* How can symbols communicate directional language?

## Picture says "Language"

* under, over, between, near, next to, forward, toward, stop, go
* quarter turn, half turn, left, right
* clockwise, anti-clockwise
* compass: North, North East, East, South East, South, South West, West, North West
* angles: 90 degrees, 180 degrees
* paces, metres, centimetres
* coordinates, guide, follower, scale, satellite navigation

## This picture says "Concepts"

* location
* direction
* rotation
* orientation
* sequence
* angle
* formal unit
* distance
* landmark

### This picture says "Curriculum Links"

* [Key Ideas](http://www.australiancurriculum.edu.au/mathematics/key-ideas) -The proficiency strands are understanding, fluency, problem-solving and reasoning. They describe how content is explored or developed; that is, the thinking and doing of mathematics.
* Describe position and movement (ACMMG010)
* Give and follow directions to familiar locations (ACMMG023)
* Identify and describe half and quarter turns (ACMMG046)
* Identify angles as measures of turn and compare angle sizes in everyday situations (ACMMG064)
* Use a grid reference system to describe locations (ACMMG113)
* Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies (ACMMG142).