WHERE ARE OUR TREES?

Target Group: **Year 5**

Australian Curriculum Reference: **Mathematics**

+ Use a grid reference system to describe locations. Describe routes using landmarks and directional language (ACMMG113).

LESSON SUMMARY

Students will use a grid map to draw the most direct route to water trees that they have planted as part of a practical volunteering activity.

Students will answer questions about their map using landmarks and directional language.

LESSON CONTENT AND METHODOLOGY

+ Teacher introduces the concept of a grid map.
    + Show video – *Drawing a city:* www.youtube.com/watch?v=xirC0LH3g7Q
    + Teacher asks students: *how could you give directions to specific places on this map?*
    + Teacher introduces the idea that coordinates help us describe where things are.
    + Teacher shows one of the following videos:
      4th Grade: Grid Coordinates: www.youtube.com/watch?v=6mm77KbD2hc or
      Grid reference: www.youtube.com/watch?v=AB3RQr-NGCs
    + Teacher tells children they are to draw a sketch map of the local area including significant landmarks, and then draw a grid over it using 4cm intervals.
    + Students name the intervals along each axis.
    + Teacher tells the students that they have been helping Greening Australia to plant trees in the local area (students may have already undertaken tree planting as part of their Geography or Science curriculum).
    + On their map, students must show the best route to take to water those trees for the next three months as part of their volunteer service.
    + Teacher talks about what a volunteer is and how people actually do tree planting as a real life volunteer activity.
    + If this activity is based on theoretical experience, the teacher will identify where the imagined trees are located (for example, on the edge of the school oval, at the front gate of the school, behind the supermarket, near the sports oval, beside the swimming pool or near the bridge).

- Teacher leads class discussion, focusing on the following questions.
  - Can you describe the location of the school in relation to the largest local grocery store?
  - What coordinates can you use to describe the location of the park?
  - Can you determine the directions N, S, E and W on the map? How did you know? What could you use to check?
  - Can you tell me about your directions for the route to water the trees? Why did you choose to go that way?
  - What effect might using larger or smaller grids have on your map?
- Lesson concludes with students watching the following video:
  - *Co-ordinates Song:* www.youtube.com/watch?v=FXYWL38HPn4

ASSESSMENT

Assessment based on accuracy of students' maps.

RESOURCES

- *Drawing a city map:* www.youtube.com/watch?v=xirC0LH3g7Q
- *4th Grade: Grid Coordinates:* www.youtube.com/watch?v=6mm77KbD2hc
- *Grid reference:* www.youtube.com/watch?v=AB3RQr-NGCs
- *Co-ordinates Song:* www.youtube.com/watch?v=FXYWL38HPn4