

Lesson Plan Ref: Astronomy**Course Ref:** ABACWS**Subject:** Computer Science**Topic:** 1D and 2D arrays**Lesson Title:** Potions**Level:** GCSE / A Level**Lesson Duration:** 50 Minutes**Lesson Objectives:**

Understand 1-dimensional and 2-dimensional arrays.

Summary of Tasks / Actions:

Learners should be initially introduced to 1-dimensional and 2-dimensional arrays. Cover how to access certain elements within them and how to traverse through them using for loops. This topic can be confusing so allow up to 20 minutes.

After the introduction learners can start the game. They will need to start the astronomy class where they will be given a tutorial to follow. Chalkboards will also contain relevant information that can help. Refer to the answer workbook for how the code should look. Learners should attempt to implement an algorithm that traverses a 1-dimensional array for task 1 and a 2-dimensional array for task 2. A 10x10 2-dimensional array is given as input for task 2, learners should be incentivized to create smaller ones to start. This should take the remainder of the lesson.

Materials / Equipment:

The world template file labelled ABACWS.mctemplate is required, import this in Minecraft for Education.

Prerequisites:

Ensure learners understand for loops well and indexing.