

Rock Weight Lifting

Curriculum links

Year 7 Maths

- Calculate volumes of rectangular prisms (VCMMG259).
- Introduce the concept of variables as a way of representing numbers using letters (VCMNA251).
- Create algebraic expressions and evaluate them by substituting a given value for each variable (VCMNA252).

Year 8 Maths

- Choose appropriate units of measurement for area and volume and convert from one unit to another (VCMMG286).

Learning intention and Success Criteria

Learning intention

- To use formulas to work out the weight of an object.

Success criteria

- Define density.
- Use dimensions to draw a rectangular prism.
- Use a formula to calculate the volume of an object.
- Use a formula to calculate the weight of an object.

Instructions to teachers

This activity has been developed for students to see how formulas can be used to solve problems. Students are required to select the correct data to substitute values into formulas to solve different volume and weight problems.

The worksheet that students complete is a word document that has been designed using the developer function. This means that students can save the document to their device and are able to modify certain sections to record their answers. Although students are able to quickly adapt to this format, it is recommended that you briefly familiarise yourself with the document before you distribute it to students.

Answers have been provided to you to make feedback to students easier.

Instructions for students

1. Download the activity, save to your device and then select view and select edit document.
2. Complete the activity and resave to your device.
3. Submit the task and photos of your working out to your teacher for feedback.