

# NUMERACY



**TITLE:** Addition, subtraction, division and multiplication

**AGE GROUP:** 9 – 11 - One

**DURATION:** 30 – 45 minutes

**LEARNING OUTCOME:** L03

**KEY CONCEPTS:** Estimate the effects of decisions

The important things (resources) that nature gives us are limited and we should not take them for granted. If we do not waste the things we have, then we can share them with other people who need it. Some people work to ensure that we are all making good use of the resources we have. They use numbers when counting the quantity of resources used and wasted. In today's activity, learners take on the task of estimating quantities and financial values of resources used and wasted in an imaginary country. As a preamble, the facilitator will find discussing the meaning of the keywords useful. Learners can be encouraged to give examples of the key words to affirm their understanding before attempting the task below.

**MATERIALS NEEDED:**

1. Writing materials – pen, pencil, paper
2. Optional: access to a spreadsheet

**Activity**

This is a short tale in numbers about food, water and waste in a certain country. There are 65 million people living in this country. In each house or family, there are an **average** of 2.4 people. Eight million of the people in this country do not have enough food to eat. Each family spends about £700 a year on food that is wasted (put into the bin). Each person wastes about 74 kilogramme of food every year. At least, 50% of the food wasted can be turned into compost for gardens and farms. 25% of fresh water supply is used to grow food that is then wasted. Each person uses 834 litres of fresh water a year.



- (i) How many litres of water do all the people in this country use each year?
- (ii) Estimate the number of families or households in the country
- (iii) Estimate the total weight of food wasted in the country every year
- (iv) Find the value of food wasted each year in the country
- (v) What other questions would you like to ask about food, water and waste in the country? What other information do you need to answer that question?