

WASTE

Activity W04

Theme

Class activity (CA). Investigating the amount of biodegradable or organic waste generated while preparing an average family dinner.

Objectives

Students should gain a better understanding of how much biodegradable waste each home or school produces and start to think of what we can do about this.

Curricular Strands

SESE, Science–Materials; Properties and characteristics of materials

SESE, Science and Geography–Environmental awareness and care

Maths–Multiplication; Weight

Skills

Questioning, observing, predicting, estimating and measuring, recording and communicating

Time

10 minute introduction; 30 minutes preparing weighing and calculating

Links to Green Schools

Waste and Litter

Food for thought

→ INVESTIGATING BIODEGRADABLE WASTE FROM A FAMILY MEAL

WHAT YOU NEED

- Weighing scales
- Plastic or rubber gloves (if you are looking at food waste in the classroom bin)
- Three potatoes and average portions of two vegetables commonly eaten, e.g. carrots, broccoli (good because the stems are heavy)
- Vegetable peeler or sharp knife, a few sheets of newspaper

WHAT YOU DO

- 1 Ask students what they eat for dinner at home, write the responses on the board
- 2 Focus on a meal consisting of potatoes and two other vegetables. This may not be a typical meal for many, but they are common and recognisable food items.

- 3 Ask the students how the vegetables are prepared for cooking. Ask students to write down the number of people who eat dinner in their house most days and to add up a total for each table or group.
- 4 While the students do the calculations, the teacher peels the vegetables onto the newspaper
- 5 Weigh the peels
- 6 Record the weight of the peels–this is the amount of waste per person in each house



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- 7 Ask students to calculate how much the peels from this meal would weigh in their house
- 8 Add the totals for each table and then for the class. This is for one day? How much for a week, or a month, or a year?

Questions

- 1 This measure of waste does not include leftover food thrown out after meals or packaging used for the food we eat. Ask students about other waste produced by the same meal.
- 2 Of every ten bags of rubbish sent to landfill in Ireland, up to six are made up of bio-degradable waste. Ask students to guess this figure before you tell them.
- 3 Ask students what can we do with this waste instead of throwing it in the bin? Introduce the idea of composting (see Waste Activity 8).

Go further

- 1 Compost your waste in the school and use it in the school garden (see Waste Activity 8).
- 2 This exercise could also look at waste generated in the classroom (if students use the bins in the school to dispose of leftover food), but this will be messier.
- 3 You could allow the class to prepare the vegetables for a meal if you are in a position to cook and eat the food afterwards. This could tie in with healthy eating.