**Waste Audit Worksheet - How Much Waste?**

In this activity you will be focusing on how much waste your school produces over the course of one year. The demonstration calculations below count one year as 52 weeks/12 months. When calculating the annual waste for your school, you will need to find out how many weeks/months your school is open for during the year to get an accurate measurement for your school. You should consider whether your school is open to other users during holiday periods (e.g. sports clubs).

**Landfill rubbish**

**1. How big is your skip?** To measure the volume of the school’s skip bin, get a 1 metre ruler or a measuring tape. Measure the length, the height and the depth in metres (L x H x D = volume m3). If you have more than one landfill skip multiply the volume by the number of bins. Be sure to check that all the skips are the same size and adjust figures accordingly.

**2. How often is it collected?** Ask the office when your skips are emptied. It is most likely to be every week or fortnight.

**3. How full is the skip when it’s collected?** Estimate how full the skip is just before it is being emptied. Convert your estimate to a volume.

**4. How many cubic metres of landfill waste are collected per month?** Calculate how many cubic metres of waste are being collected per week and then work out the monthly volume.

Total volume of rubbish x how often it’s collected per month = \_\_\_\_ m3 per month.

**5. How many cubic metres of landfill waste are collected per year?** Multiply your monthly volume by 12 = \_\_\_\_\_\_\_\_\_\_\_ m3 landfill waste per year.

**6. How many kilograms of waste are collected per year?** Multiply your annual volume by 131 = \_\_\_\_\_\_\_\_\_\_\_ kgs of waste per year.

*Conversion factors - 1 cubic metre of mixed waste (not compacted) weighs 131 kg.*

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| **1. Total volume of skip** | **2. How often is it collected?** | **3. How full is the skip when it’s collected (cubic metres)?**  | **4.Total volume of waste collected per month (cubic metres)** | **5. Total volume of waste collected per year (total usage)** | **6. Total weight of waste collected per year** |
| *Example: 3 m3* | *1 per week* | *1.5 m3* | *6 m3* | *72 m3* | *9,432 kg* |
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If the total volume of the MCG is 1,700,000 cubic metres, what percentage of the MCG does one year of waste at your school represent?

**Paper and cardboard**

**1. What is the total volume of your paper recycling bins or skips?** Measure the length, the height and the depth in metres (L x H x D = volume m3). If you have more than one recycling bin or skip multiply the volume by the number of bins.

**2. How often are the paper bins/skips emptied?** Find out when the bins are emptied. Most bins are collected every week or two weeks.

**3. Check out how full the bins or skips are when they are being collected.** If it’s not near collection time, ask the school cleaner how full the bins usually are.

**4. What is the volume of paper being collected per month?** Volume in bins/skip x how often it’s collected per month = \_\_\_\_ m3 per month.

**5. How many cubic metres of paper is collected per year?** Multiply your monthly amount by the number of monthly collections per year, e.g. 12 = \_\_\_\_ m3 per year.

**6. How many kilograms of paper and cardboard are collected per year?** Multiply your annual amount by 240 = \_\_\_\_\_\_\_\_\_\_\_kgs per year.

**Tip:** Another way to measure volume is in litres. 1 cubic metre = 1,000 litres.

*Conversion factors - 1 cubic metre of paper and cardboard waste weighs 240 kg.*

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| **1. Total volume of bins or skip** | **2. How often are the paper bins/skips emptied?** | **3. How full are the bins or skips when they are being collected?** | **4. Total volume of paper and cardboard collected per month (cubic metres)** | **5. Total volume of paper and cardboard collect per year (cubic metres)**  | **6. Total weight of paper and cardboard collected per year (kg)** |
| *Example: 1 skip = 3 m3* | *1 per fortnight*  | *full = 3 m3* | *6 m2* | *72 m2* | *17,280 kg* |
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**Other recyclables**

*Conversion factors*

* *1 cubic metre of mixed waste (not compacted) weighs 131 kg.*
* *A wheelie bin holds either 120 or 240 litres (or 0.12 or 0.240 cubic metres) - check your bins before making your calculations.*

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| **Number of wheelie bins or skips collected each week**  | **Volume of each bin or skip (cubic metres)** | **Total volume of recyclables collected (cubic metres)** | **Total weight of other recyclables collected per week (kg) (multiply number of cubic metres by 131)** | **Total weight of other recyclables collected per year (kg) (multiply your weekly amount by 52)** |
| *Example: 2* | *0.24* | *0.48* | *63* | *3,276* |
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**Food waste**

*Conversion factors*

* *1 cubic metre of food waste weighs 200 kg.*
* *One bucket holds about 10 litres or 0.01 cubic metres.*

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| **Number of wheelie bins or buckets collected each week** | **Volume of each bin or bucket (cubic metres)** | **Total volume of food waste collected (cubic metres)** | **Total weight of food waste collected per week (kg) (multiply number of cubic metres by 200)** | **Total weight of food waste collected per year (kg) (multiply your weekly amount by 52)** |
| *Example: 20 buckets* | *0.01* | *0.4* | *40* | *2,080* |
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**Green waste**

Green waste includes leaves, grass clippings, light prunings, etc.

*Conversion factors - 1 cubic metre of mixed green waste weighs 64 kg.*

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| **Number of containers collected each week** | **Volume of each container (cubic metres)** | **Total volume of green waste collected (cubic metres)** | **Total weight of green waste collected per week (kg) (multiply number of cubic metres by 64)** | **Total weight of green waste collected per year (kg) (multiply number of cubic metres by 52)** |
| *Example: 1* | *0.24* | *0.24* | *15* | *780* |
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**Special rubbish collections**

Many schools have a hard rubbish collection once or twice year. Check with your rubbish collector whether this rubbish ends up in landfill or is sorted for recycling.

*Conversion factors - 1 cubic metre of mixed waste (not compacted) weighs 150 kg.*

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| **Number of skips of rubbish collected each year** | **Volume of each skip (cubic metres)** | **Volume of each skip (cubic metres)** | **Total weight of special rubbish collected per year (kg) (multiply number of cubic metres by 150)** |
| *Example: 2* | *10* | *20* | *3,000* |
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**What is the combined total waste your school produces over one year?**

* Calculate the weekly totals for rubbish, paper and cardboard, other recyclables, food waste and green waste
* Calculate the yearly total for special rubbish collections

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| **Type of waste** | **Amount per week (kg)** | **Amount per year (kg) (i.e. for 40 school weeks, multiply amount per week by 40)** |
| Rubbish |  |  |
| Paper and cardboard |  |  |
| Other recyclables |  |  |
| Food waste |  |  |
| Green waste |  |  |
| Special rubbish collection |  |  |
| **Total** |  |  |