

PRODUCTION, CONSUMPTION & WASTE AUDITS

INTRODUCTION

An audit is a technique that through unbiased exploration helps establish the baseline levels of a particular facet of an organisation (your school in this case). Once the baseline has been ascertained, you can move to improve wherever you fell short.

To perform an environmental audit, one is required to **investigate, measure, analyse** and **evaluate** our environment in an unbiased way using a resource or activity.

Sustainable Schools' audits employ the **Active Learning Framework** – learners investigate information about environmental issues, explore these through direct interactions in the environment and, are then able to act based on their findings. Learners become active participants in positive environmental change.

All our activities follow the four steps of the Active Learning Framework:

1. **Tuning in** (collect & analyse data – access information)
2. **Finding out** (investigate, experiment, and explore – document evidence)
3. **Act** (plan projects that focus on environmental improvement)
4. **Communicate/Report** (discuss, reflect and share)

Waste Audits

Why is tackling our waste issue important?

Our world has a waste problem. Many people belong to a “throwaway culture”, and this is leading to massive amounts of waste being produced. Combined with a global lack of efficiency dealing with this waste, we have a massive challenge on our hands. Did you know that most waste produced is dumped in landfills or burnt (a massive 90% in low-

income countries)?¹ Landfills are associated with numerous issues including, but not limited to:

- Greenhouse gas production
- Pollution
- Toxic leachate
- Respiratory issues from burning waste
- Ocean pollution

Schools are big contributors to the annual waste produced in South Africa. Most teachers and learners are unaware of where waste ends up. This lack of awareness influences our responsibility and role we play in waste management.

¹ <https://www.worldbank.org/en/news/immersive-story/2018/09/20/what-a-waste-an-updated-look-into-the-future-of-solid-waste-management>

How is your school contributing to the “waste issue”?

The objectives of the waste audits include the following:

- To introduce the concept of the waste management cycle to learners.
- To introduce learners to the variety of methods used to measure waste production.
- To understand the waste production and management of waste within the school community.
- To facilitate discussion around the importance of reducing our waste production.
- To strategize methods to improve school management of waste.

Basic guidelines

1. **Understand** – ascertain the learners understanding of introduced concepts.

2. **Introduce** – establish the basic concepts of the waste management cycle and methodology used to measure it.
3. **Discuss** – establish methodology.
4. **Act** – undertake waste audit.
5. **Reflect** – discuss results.
6. **Communicate/Report** – learners should be able to communicate method, results, and conclusion.

Grade 1-3

Waste Not Want Not	
Prior knowledge:	None.
Equipment needed:	Waste audit worksheets, coloured pencils/crayons, clipboards (if available)
Duration:	1 hour
Extra notes:	Inside or outside lesson, depending on dustbin placement

Grade 6 & 7

Watching our Waste	
Prior knowledge:	Tally system, basic mathematical skills
Equipment needed:	Gloves, labels, large sheet of plastics, waste audit worksheets, paper, pencils, pens clipboards (if available), dustbins filled with rubbish
Duration:	1 – 1.5 hours
Extra notes:	Part of the lesson is outside so is weather dependent (preferably morning with no wind). Safety issues regarding handling of waste should be discussed prior to the lesson

Grade 8-11

<i>Inquiry-Waste Learning</i>	
Prior knowledge:	Basic mathematical skills
Equipment needed:	Gloves, labels, large sheet of plastics, scales, waste audit worksheets, paper, pencils, pens clipboards (if available), dustbins filled with rubbish
Duration:	1 - 1.5 hours
Extra Notes:	Part of the lesson is outside so is weather dependent (preferably morning with no wind). Safety issues regarding handling of waste should be discussed prior to the lesson