



Waste

Curricula Overview

Alongside our [Zero-waste Toolkit](#) we offer a variety of educational resources designed to help teachers integrate and promote valuable learning around responsible waste management and circular economy education in their classrooms and at school.

Waste education is imperative in creating a zero-waste culture and community at school. It sets the foundation for behaviour change to happen. The waste infrastructure and resources in our toolkit create the bedrock for environmental and waste action, but waste education allows for deeper understanding and empathy towards the situation. This is vital in creating a generation of young minds who feel encouraged and empowered to make a difference to the world we live in.

Curricula Partners



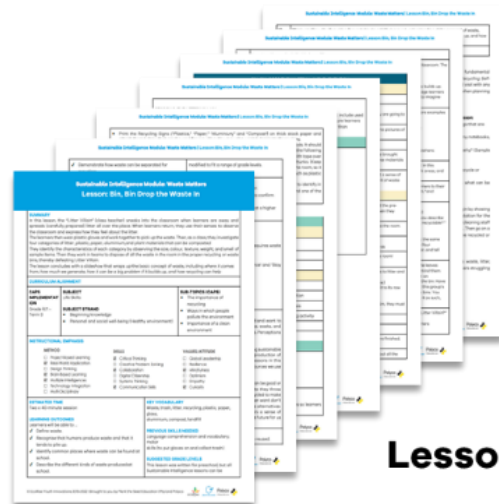
We have partnered with EcoRise to bring this curriculum to South African classrooms. EcoRise design their curriculum to cater for all ages. Each module has a project-based learning focus aiming to develop key 21st century skill sets and knowledge.



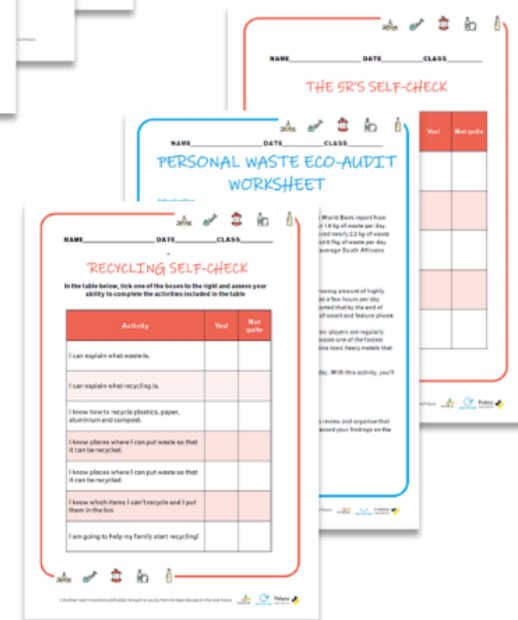
We have partnered with Polyco to contextualise, adapt and CAPS align EcoRise Sustainable Intelligence Waste curriculum for the South African classroom. Together we have done 5 modules for Grade R-8.

Thanks to Polyco you can access the following lesson plans from our waste modules for free. These lesson plans are part of bigger modules that aim to drive specific themes around responsible waste management targeted at appropriate age groups. See more information on each module and lesson plan below.

Age group	Lesson name	Module	Resources
Grade R-1	Bin, bin, drop the waste in	Waste Matters	2 x 50-minute lessons with teachers notes, presentations, and learner activities
Grade 5-6	The 5R's	Trash or Treasure	1 x 50-minute lesson with teachers notes, presentations, and learner activities
Grade 7-8	Zero Waste Campaign	Imagine Zero-Waste	1 x 50-minute lesson with teachers notes, presentations, and learner activities



Learner Activities and Projects



Grade R	Waste Matters	CAPS Alignment
Bin, bin, drop the waste in	In these 2 x 50-minute lessons, “Litter Villain” sneaks into the classroom when Learners are away and spreads (carefully prepared) litter all over the place. When Learners return, they use their senses to observe the classroom and express how they feel about the litter. They don plastic gloves and work together to pick up the trash. Then, as a class, they investigate four categories of litter: plastic, paper, aluminium, and plant materials that can be composted. They identify the characteristics of each category by observing the size, colour, texture, weight, and smell of sample items. Then they work in teams to dispose of all the trash in the room in the proper recycling or trash bins, thereby defeating Litter Villain. The lesson concludes with a presentation that wraps up the basic concept of waste, including where it comes from, how much we generate, how it can be a big problem if it builds up, and how recycling can help. Key Questions What is waste? What happens to the things we throw away? What is recycling?	Grade: R/1 – Term 3 Subject: Life Skills Strand: - Beginning knowledge - Personal and social well-being (Healthy environment) Sub-topics: - The importance of recycling - Ways in which people pollute the environment - Importance of a clean environment
Nature’s recyclers	In these 2 x 40-minute lessons, Learners look below the surface of the natural world to catch a glimpse of nature’s recyclers. They learn how organisms in nature help dead plants and animals rot and turn into something useful. They learn the term decomposer and look at several examples of common decomposers. Learners then work in teams to create dioramas that show places nature’s recyclers might be found in a forest setting. Key Questions How does nature recycle?	
Something from nothing	In this 45-minute lesson, Learners learn a new and exciting way to limit the amount of waste they produce they can reuse it for something completely different! With an old egg carton, Learners create something new and fun and see the possibilities in making something from nothing! They also learn the concept of the 3Rs (Reduce, Reuse, Recycle) via a lively tune that will get them singing along. Key Questions What are the 3Rs? What are some ways we can reduce, reuse, and recycle things we normally throw away? How does reducing our waste help the environment?	

Grade 1-2	Waste Not, Want Not	CAPS Alignment
Making paper	In these 2 x 45-minute lessons, Learners watch a video to see how paper is made from trees. Then they participate in a presentation and discussion that helps them visualize trees and forests and why they are a valuable natural resource. Learners then recycle old newsprint into new paper and discover that recycling works. They use their newly made paper to create, for the community, art with a positive message about the environment and recycling. Key questions Where does paper come from? Why should we recycle? How can we recycle paper?	Grade: 1 – Term 3 Subject: Life Skills (LO 4): Understanding the relationship between people and the environment Strand: - My Community Sub-topics: - Keeping places clean and tidy - Use of bins and not littering
Let's compost	In this 40-minute lesson, Learners review the types of materials that make good compost and then explore the school grounds to forage for leaves and twigs. Next, they assist while their teacher demonstrates how to use layers of organic materials to create an effective compost pile. After discussing the many benefits of compost, Learners work together to create a poster that shows what they've learned. Key Questions What is compost? How is compost made? What are some ways that compost is useful?	Grade: R/1 – Term 3 Subject: Life Skills Strand: - Beginning knowledge - Personal and social well-being (Healthy environment) Sub-topics: - Soil
Don't waste lunch	In this 40-minute lesson, Learners learn that a simple school lunch can generate a lot of waste. They take a close look at a typical lunch they bring from home and compare it to lunches that produce a lot of waste and lunches that produce no waste. Then they think about how they can reduce, reuse, and recycle to improve their current waste habits. The lesson concludes with Learners decorating a letter to take home to spread awareness about sustainable lunch-packaging practices. Key Questions What habits can I adopt to make my lunch more sustainable? What happens to all the trash we generate? How could I influence other people to create less waste?	Grade: R/1 – Term 3 Subject: Life Skills Strand: - Beginning knowledge - Personal and social well-being (Healthy environment) Sub-topics: - My community (Looking after facilities in my community; Keeping places clean)

Grade 3-4	Trash or Treasure?	CAPS Alignment
Little landfill	In these 2 x 50-minute lessons, Learners learn that waste does not just go away after it is thrown in a trash can; it ends up in a landfill or a dump, or it is burned. Each of these systems solves the problem of getting the waste out of sight, but each also creates new problems along the way. As a result, many communities are adopting a zero-waste vision for the future, which involves rethinking how much waste we create and what happens to it. Learners explore these concepts and how waste is handled differently in different places. Then they conduct a scientific simulation of a landfill to answer this question: Which kind of waste lasts longer in a landfill—organic waste or inorganic waste? Key Questions Why should we be concerned about what happens to our waste? Why is it important to think of wastes in terms of organic and inorganic?	Grade: 3 – Term 2 Subject: Life Skills Strand: - Beginning knowledge - Personal and social well-being (Healthy environment) Sub-topics: Recycling - What happens to our waste? - Re-using, recycling, and reducing - Making compost out of things that decompose
Building bins	In these 2 x 50-minute lessons, Learners learn the difference between organic garbage (which comes from natural sources and readily degrades) and inorganic garbage (which comes from human-made sources and can take a very long time to degrade). They learn the value of sorting different types of wastes so that those wastes can more easily be managed in a sustainable way. Finally, Learners make recycling bins and learn advocacy skills as they educate the school community about the purpose and value of the bins. Key Questions How important are our habits when thinking about waste management? How can sorting our wastes help us reduce the amount of waste we send to the landfill? What would happen if no one paid any attention to the waste they create and threw every bit of it away?	
The 5R's	The 3Rs: Reduce, Reuse, and Recycle are commonly used to help people remember to be responsible with their waste. In this 50-minute lesson, Learners expand the 3Rs to the 5Rs: Reduce, Reuse, Recycle, Rot, and Reflect. The term rot helps them remember the importance of composting. Learners explore the term reflect to learn how to be aware of and question their personal behaviours and more global issues related to waste. Learners demonstrate what they learned by working together to create a set of posters they can share around the community. In this way, they also learn how to be advocates for social change. Key Questions How does keeping the 5Rs in mind give me a tool for managing my waste better? What actions can I take right away to apply the 5Rs? How can I share the 5Rs with other people? If everyone practices the 5Rs, what impact will those practices have on our community? the world?	

Grade 5-6	Waste and Energy	CAPS Alignment
Waste innovations	In these 3 x 50-minute lessons, Learners learn about innovations in waste management from communities around the world. Then they work in teams to research options that would solve waste management issues specific to your community. They put together a presentation to promote their chosen option while the other teams role-play community leaders who are charged with selecting the most effective waste management solution for the community. This "city council" then evaluates each presentation and chooses the most compelling option for waste management in your area. Key Questions What are some common issues related to waste management? What are some potential solutions to waste management problems? What waste management solution do you think would be best for your community?	Grade: 5 – Term 4 Subject: Life Skills Strand: - Health and environmental responsibility Sub-topics: - Local environmental health problems
E-Waste	In these 2 x 50-minute lessons, Learners learn what electronic waste (e-waste) is and why it is a growing problem for human societies and the environment. Then they work together to brainstorm a way to build awareness and change within the school community and beyond. Key Questions Why is electronic waste a particularly difficult waste problem? What can you do to help reduce your contribution to e-waste?	
It's hazardous	In this 50-minute lesson, Learners investigate a particularly difficult type of waste to manage nuclear waste. They explore the complexities and controversies surrounding this topic by first reviewing some basic pros and cons related to nuclear waste. Next, they conduct a kinaesthetic simulation to reiterate benefits and challenges and help them viscerally understand the complexities of the issue. Finally, they have an open discussion to share what they learned and their thoughts about the topic. Key Questions What are some of the risks associated with using nuclear energy? Do you think the positive benefits of using nuclear power to create electricity outweigh the risks? What are some actions you could take to reduce your dependence on fossil fuels or nuclear energy?	

Grade 7-8	Imagine zero-waste	CAPS Alignment
Zero-waste campaign	In this 50-minute lesson, Learners examine how traditional thinking about waste management has created a global waste management crisis. Then they learn how a new way of thinking—zero-waste thinking—offers hope for the future. They review how the 5Rs (reduce, reuse, recycle, rot, reflect) can help communities develop a zero-waste mindset. Finally, Learners are challenged to put what they've learned into practice by implementing a zero-waste initiative at the school. Key Questions What are some ways you can apply the zero-waste philosophy in your daily life? What surprised you the most about your zero-waste initiative? What actions would you recommend your school take to move from a traditional production/consumption cycle to a zero-waste production/consumption cycle? Imagine that everyone in your community recycled and composted. How would that impact waste management for better and worse? What do you think businesses, governments, and individuals could do to be more responsible about electronic wastes?	Grade: 7 – Term 3 Subject: Life Orientation Strand: - Health, social and environmental responsibility Sub-topics: - Local environmental health problems - Community projects to address environmental health problems - Problem-solving skills: An action plan to address environmental health problems
Personal waste audit	In these 2 x 40-minute lessons, Learners learn how much waste the average person produces and think about how their own daily waste production compares to that average. Then they spend 24 hours collecting all the (non-hazardous) wastes they personally generate. Next, Learners' inventory and log their results and reflect on how their waste production compares to the global average. Learners also make a list of the electronic items they own or have owned and consider their personal role in managing e-wastes responsibly. Key Questions Do you agree or disagree with this statement: "Humans should be responsible for the solid waste they produce and look for ways to deal with it safely, cost-effectively, and sustainably"?	
Soil with soul	In this 55-minute lesson, Learners learn how the simple act of composting their plant-based wastes can help create a sustainable future in several vital ways. They take a microscopic look at a variety of soil samples to identify the characteristics of healthy and unhealthy soils. Along the way, they learn the value of topsoil, why it is threatened, and what they can do to help protect it. Key Questions Why should we care about soil and whether or not it is healthy?	