



GRADE  
**1**

**TEACHER'S  
GUIDE**

# Platinum

Coding and Robotics

Maskew Miller Learning  
10 Freedom Way, Milnerton, Cape Town, 7441

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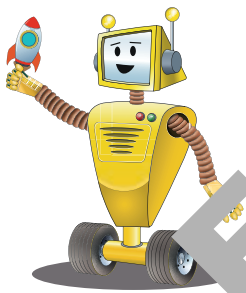
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# Introduction

Dear Teacher

Welcome to an incredible adventure in teaching and learning! This is not just another subject, but a great experience in your career! You are at the forefront as both a guide and a lifelong learner! Get ready to dive into a journey where discovery happens daily. You will learn right alongside your learners, and every day brings fresh excitement and curiosity!

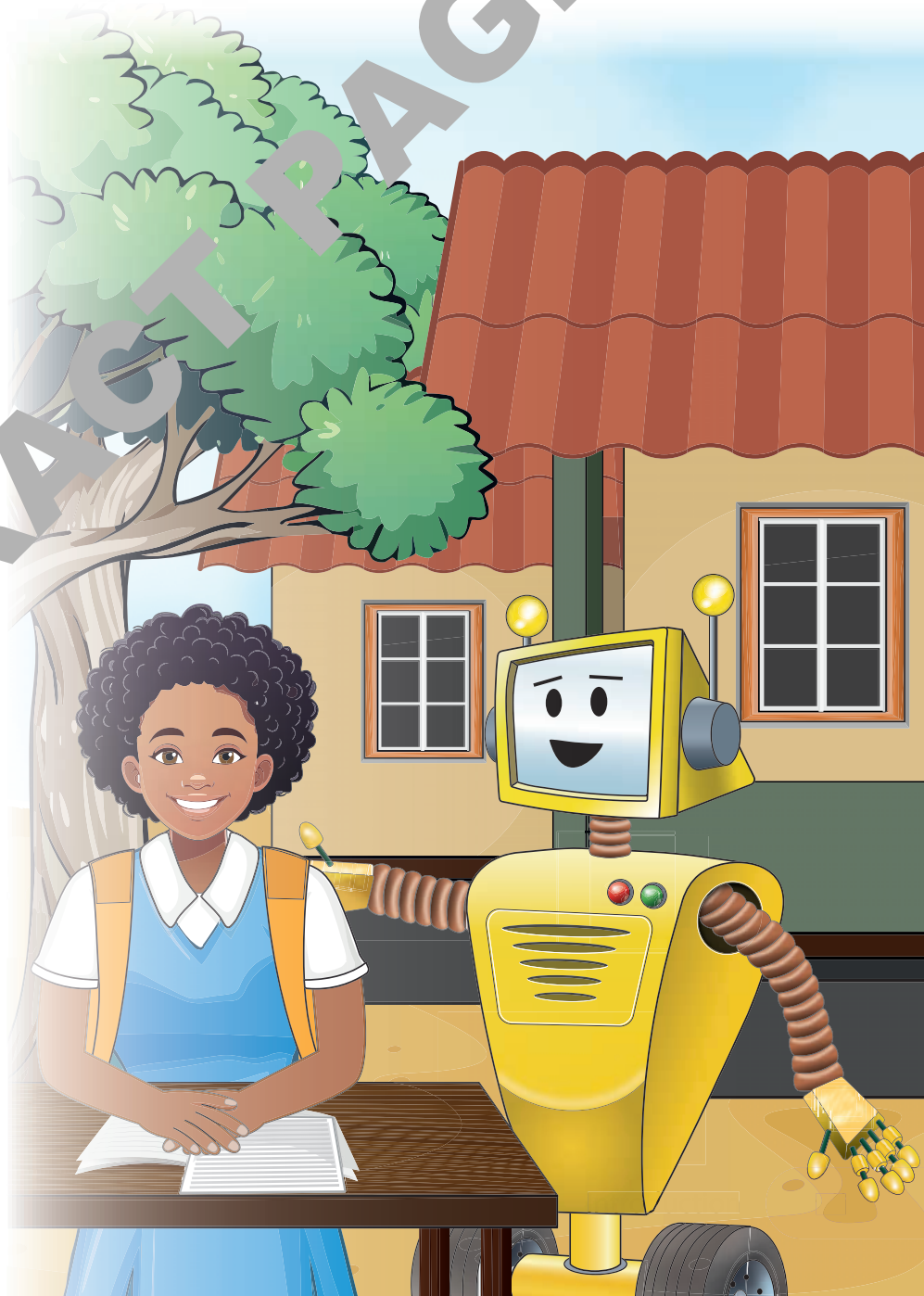
As a mediator, you will help learners navigate the information-rich world where the Internet of Things (IoT) and other technologies add new dimensions to teaching and learning.

Your openness to learning alongside your learners will create a powerful example, showing them that learning is a lifelong journey and that adaptation and curiosity are key in our ever-evolving world.

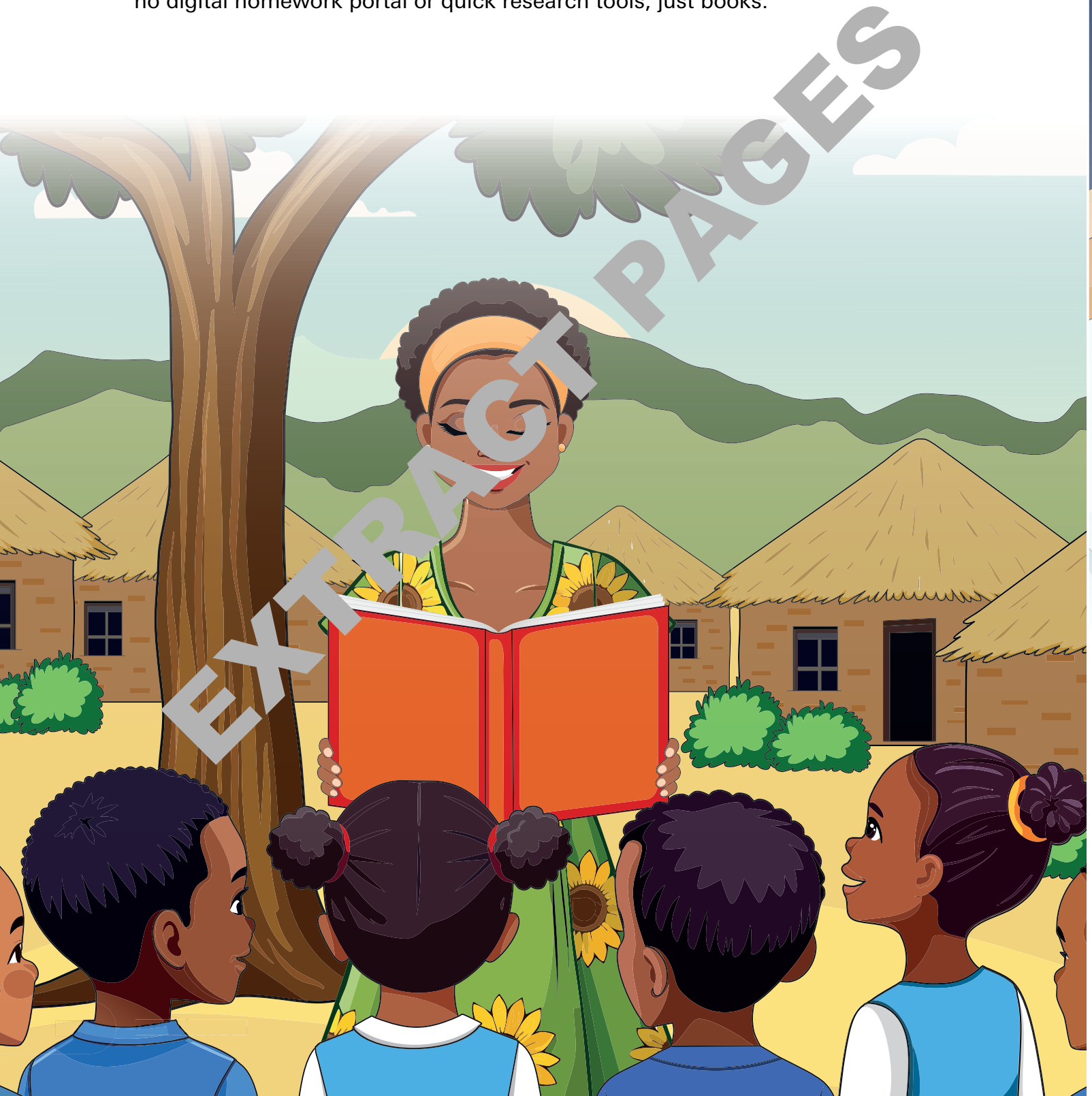
Thank you for stepping into this role with such dedication and a willingness to grow together with your learners. Your journey as a teacher-learner will undoubtedly inspire and empower each learner in your classroom.

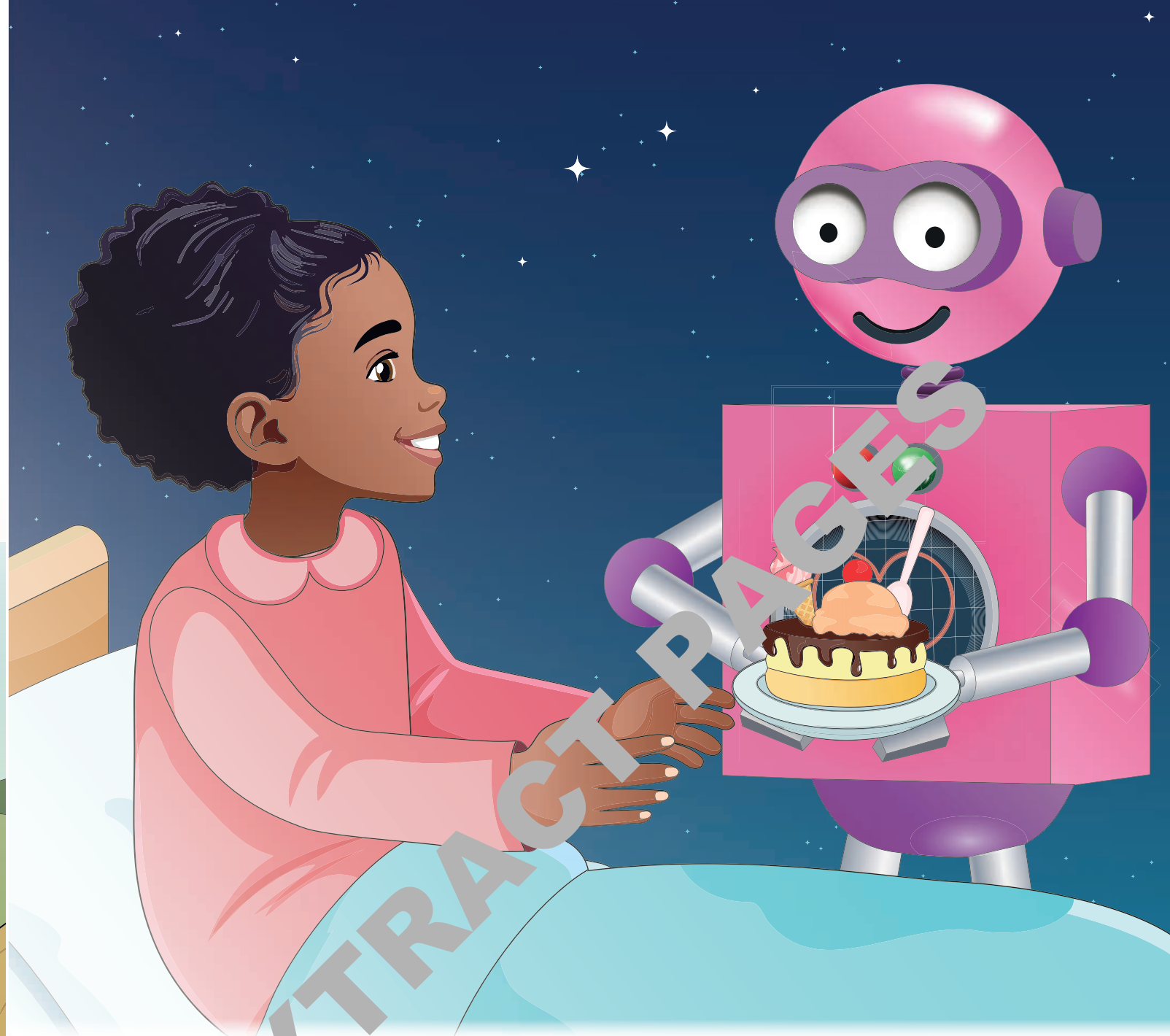
Imagine a World without Digital Technology!

In a village called Lombard, there were no computers, internet, smartphones, or robots. Life moved slowly. Messages were delivered by hand, and learning was limited to books and teacher explanations.



In school, learners used chalkboards for every subject while others used to sit under the trees and sing songs and storytelling as part of learning. They could not watch videos or look up information online. For Katlego, who loved animals, learning about kangaroos or polar bears meant reading descriptions and looking at drawings, no real-life videos or images were available. After school, there was no digital homework portal or quick research tools, just books.





One day the village ladies imagined a new world where they could communicate instantly, explore new places through screens, and make daily life easier, and connect with people in the global village!

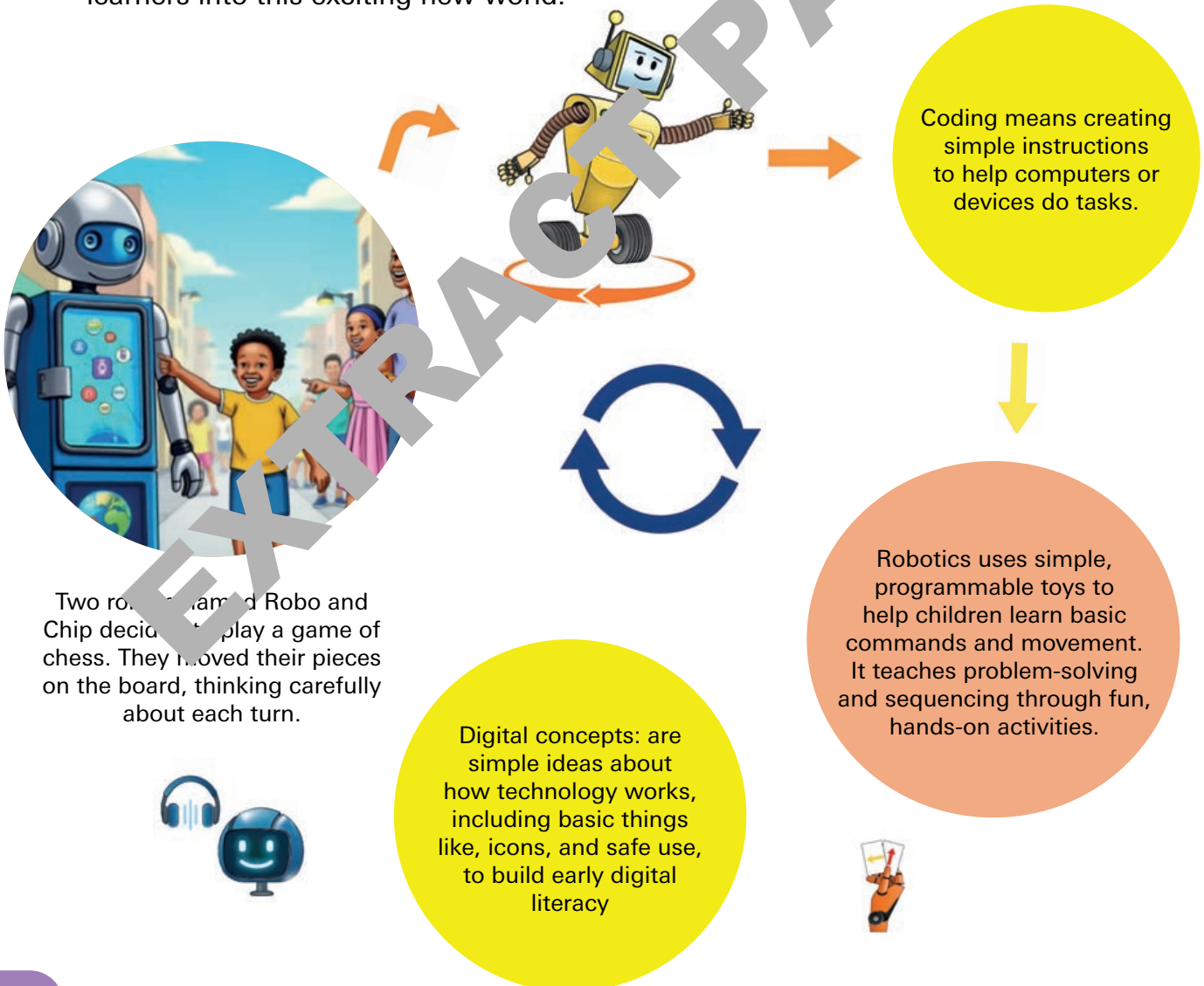
Eight-year-old Katlego, feeling unwell, imagined a robot friend named Renata. In her imagination, Renata was kind, helpful, and made her and her friends smile. Each day, her imagination gave her strength, and soon, Katlego began to feel better, knowing her dreams were helping her to heal

## 2. A whole new game changer!

### 4IR – 4th Industrial Revolution in teaching and learning

Ms Nomonde is thrilled to receive a laptop from the department, a tool she plans to use to enhance her teaching and better support her learners. Together with her colleagues from Lombard’s Village, she’s diving into digital learning, guided by an experienced coder called the Digital Ranger. They explore the Internet of Things (IoT) and learn how coding and other subjects connect, eagerly sharing their discoveries.

As she prepares her class, Ms Nomonde looks forward to using unplugged activities, hands-on exercises without devices to introduce learners to coding. With her laptop and newfound digital insights, she’s ready to guide her learners into this exciting new world.



### 3. How to use this series

#### 3.1. Features of the Learner’s Book

The Learner Book contains a recurring theme that runs through each week’s activities, creating a cohesive and engaging learning experience.

Each week presents a new scenario that challenges learners to apply their knowledge in practical situations.

The “Let Us Begin” section serves as a starting point to assess learners’ initial knowledge and connects directly to the material they need to learn.

At the end of each week, the “Self-Assessment” section provides learners with an opportunity to reflect on their work, encouraging a thoughtful approach to learning. Ask learners to draw one of the four faces in their books or show one to four fingers to rate their effort in the activity.



Additionally, there is a “New Word” section dedicated to explaining unfamiliar words found in the lessons, helping learners expand their vocabulary in a meaningful way.









#### Self-assessment grid

How do you feel about the work you did?

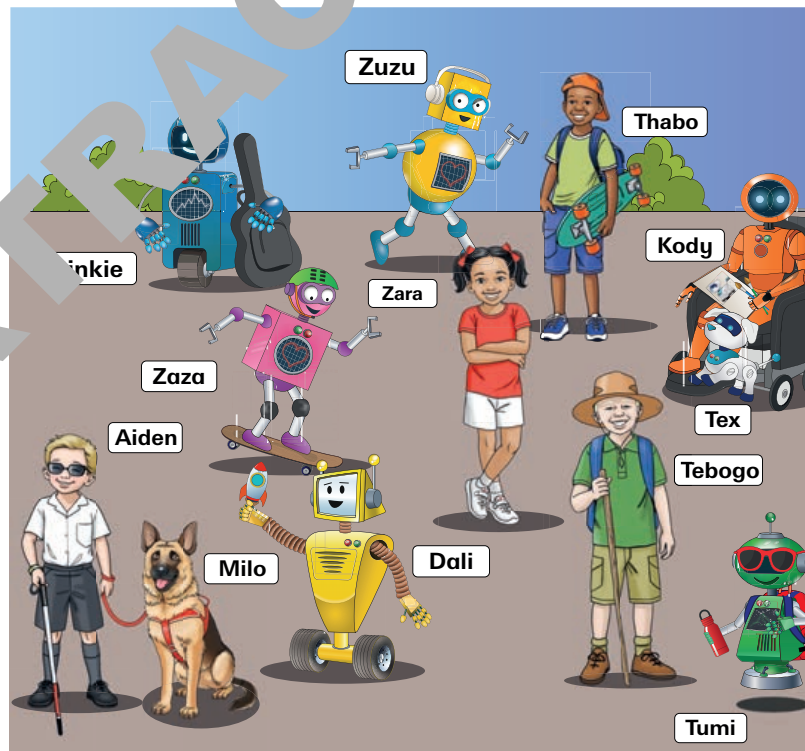
1 	2 	3 	4 
Trying!	Happy!	Proud!	Yay!

Throughout the book we have integrated icons to indicate the type of learning and activities that are taking place.






















	<b>Pair programming:</b> time to work with my friend
	<b>Cooperative learning:</b> time to work as a group

	<b>Coding cards:</b> time to code
	<b>Unplugged coding:</b> coding through play
	<b>Practical:</b> time to use my hands and my brain
	<b>Draw:</b> time to draw and write
	<b>Speak:</b> time to talk about things
	<b>Think:</b> time to use my brain and imagination
	<b>Body movement:</b> time to move my body
	<b>Class discussion:</b> time to share

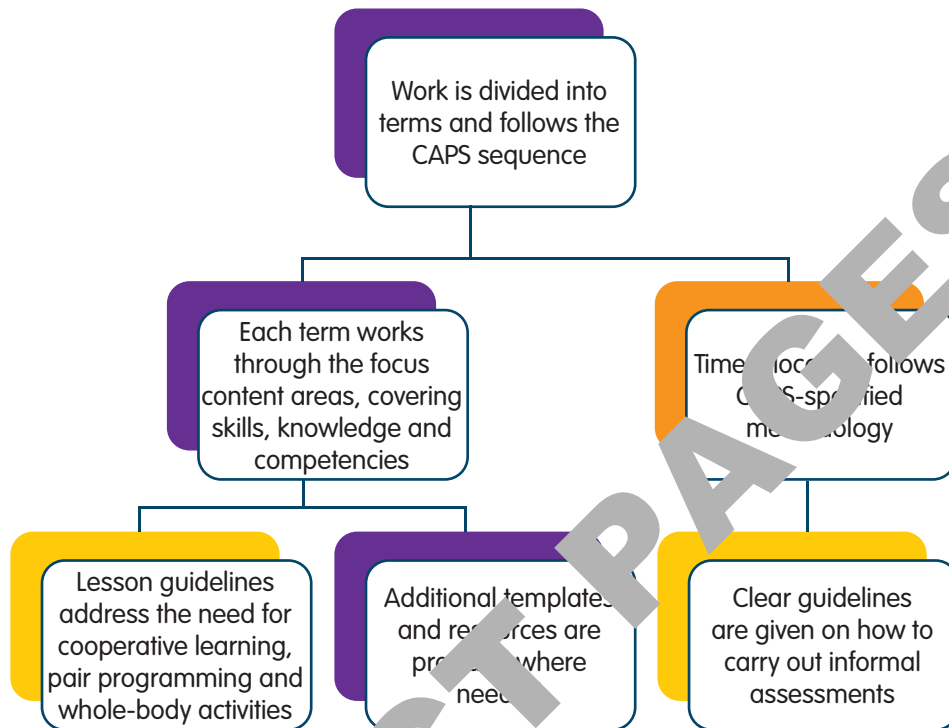
### 3.2. Meet the team



### 3.3. Coding cards

Coding Card	Label	Description (action)	Coding Card	Label	Description (action)
	Forward	Move one step forward.		Sound	The sound icon tells you to listen for a sound.
	Up	Move one step up.			
	Down	Move one step down.		Dance	The dance icon tells you to do a dance move.
	Left	Move one step to the left.		Speak	The speak icon tells you to say a word.
	Right	Move one step to the right.		Draw	The draw icon tells you to draw.
	Start	The start icon shows you where the starting point is.		Clap	The clap icon tells you to clap once.
	Go	The go icon shows you when to begin.		High - five	The high-five icon tells you to give a high-five.
	Stop	The stop icon shows you when to stop.		Follow	The follow icon tells you to follow along.
	Repeat twice	Repeat the action two times.		Thumbs up	The thumbs up icon is used to say yes.
	Repeat three times	Repeat the action three times.		Thumbs down	The thumbs down icon is used to say no.
	Repeat four times	Repeat the action four times.		Think	The lightbulb tells you to: think of something be creative (idea) make a plan
	Repeat five times	Repeat the action five times.			

## 4. Features of the Teacher's Guide



## 5. Overview

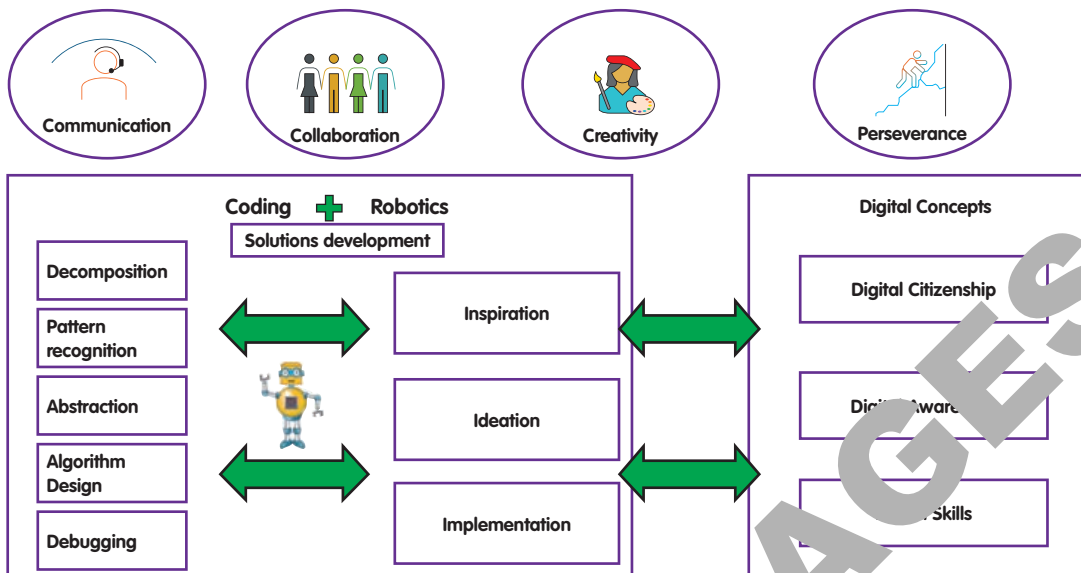
### 5.1. What is Coding and Robotics?

Coding and robotics combine programming principles with robot design, construction and operation.

Programming concepts, practices, and perspectives are applied to control robots to perform specific tasks.

It includes digital concepts that refer to various ideas, principles, and processes associated with digital technologies and their uses.

The Coding and Robotics curriculum is based on the following pillars, as depicted in the figure below:



The Coding and Robotics curriculum is based on the following concepts:

Coding is the process of writing instructions that a computer can understand and follow. It's how people tell computers what to do, step by step, to make them perform different tasks.

Robotics combines science and engineering to create machines that can perceive their surroundings, make decisions, and carry out tasks independently. It offers learners a hands-on chance to explore, experiment, and develop their own designs. Robotics focuses on the creation, operation, and application of robots.

Digital concepts include a wide range of skills and understanding that help learners use technology effectively and responsibly.

## 5.2. Specific aims

Develop problem-solving skills through computational thinking.

Improve design thinking to create innovative and people-focused solutions.

Become part of a generation of creative thinkers who use coding, robotics, and digital skills to express ideas.

Encourage creativity, critical thinking, teamwork, communication, and innovation.

Act responsibly and effectively in a digital world.

Understand how technology impacts society.

Build confidence to handle challenges using computational and design thinking.

## 6. Specific Skills

### 6.1. Computational Thinking

Computational thinking is a problem-solving process that involves breaking down complex problems into smaller, manageable parts.



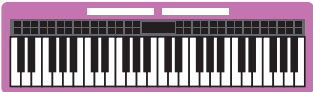

It helps learners improve their problem-solving skills in coding and robotics. These skills can also be used to solve everyday problems.

It is a way of thinking and a set of skills that use techniques to solve problems and complete tasks effectively.

Computational thinking helps people find solutions that both humans and computers can understand.

Computational thinking is not just for computer science; it can be applied to various fields and everyday situations, helping individuals think logically and systematically.

It includes the following components:

 <p>Abstraction: To focus on the important and relevant information and ignoring the unimportant and irrelevant information.</p>	 <p>Decomposition: To solve a complex problem by breaking it into small, manageable parts.</p>
 <p>Pattern Recognition: To identify similarities and differences. Recognising the same patterns in other problems helps you in solving a new problem.</p>	 <p>Algorithm: To define a precise sequence of steps or instructions to perform a task.</p>

In robotics, learners use computational thinking to design, build, and program a robot. The robot's performance shows how well they applied this thinking as they test and fix their code.

## 6.2. Design Thinking

Design thinking focuses on people and fosters creativity and innovation.

It follows the following three-step process:

Design thinking is a problem-solving approach that blends creativity with structure and focuses on understanding and addressing challenges.

The following describes the design process:

Empathise: understanding who the end user is within a particular context.

Define: detailing the users' needs, including their skills, goals, and core principles.

Ideate: involves creating ideas and solutions using different methods.

Prototype: involves creating one or more solutions to solve the problem.

Test: to evaluate the efficacy of the solution.

## 7. Synergising Coding and Robotics in Foundation Phase

<p><b>Algorithms</b></p> <p>In literacy, organising and summarising play an important role. In mathematics, breaking down complex problems into smaller, easier steps is an important way to solve problems.</p>	<p><b>Modularity</b></p> <p>In computer science and mathematics, breaking tasks into smaller, manageable parts makes them easier to handle and solve.</p>	<p><b>Control structures</b></p> <p>In coding, determine the order in which a set of instructions runs in a program. In mathematics, exploratory thinking means using logic and trying different methods to solve problems.</p>
<p><b>Coding and natural language</b></p> <p>The process of learning to code is frequently compared to acquiring a new language.</p>	<p><b>Design</b></p> <p>Designing robotic artifacts connects to elements of the Creative Arts and integrates parts of Life Skills.</p>	<p><b>Digital concepts</b></p> <p>Aspects such as the effects of technology and being a digital citizen are related to Life Skills (Personal and Social well-being).</p>

## 8. Time allocation

According to the Curriculum and Assessment Policy Statement (CAPS), the teaching of Coding and Robotics is structured as follows for Grades R to 3:

Grades R, 1, and 2	
Weekly allocation	1 hour
Term total	10 hours

Grade 3	
Weekly allocation	1 hour
Term total	10 hours

The following table provides the time allocation across the strands in Coding and Robotics for Foundation Phase:

Time allocation across the strands for Foundation Phase Coding and Robotics			
Strands	% time per week	Grade R - 2	Grade 3
Pattern Recognition	15%	9 minutes	18 minutes
Coding	50%	30 minutes	60 minutes
Robotics	30%	18 minutes	36 minutes
Digital Concepts	5%	3 minutes	6 minutes
<b>Total</b>	<b>100%</b>	<b>60 minutes</b>	<b>120 minutes</b>

Because the concepts are interconnected across strands, the time spent on pattern recognition can be combined with coding (algorithm design and coding), robotics, and digital concepts content.

## 9. Diversity, Equity and Inclusion



**Table 1: Types of diversity**

Diversity category	Definition	Coverage in the book
1. Disability and Accessibility	This involves representing people from different economic backgrounds and discussing issues of economic inequality.	We feature characters from a variety of socioeconomic contexts, highlighting challenges like access to education, healthcare, and resources. This allows learners to engage with real-life examples and discussions that reflect diverse economic situations, making the content relatable to all.
2. Cognitive and Learning Diversity	This refers to addressing different learning styles, abilities, and cognitive differences, such as neurodiversity.	We have embraced cognitive and learning diversity by incorporating varied teaching methods that cater to different learning styles. Activities are designed to accommodate a wide range of learning needs, promoting an inclusive learning environment. We have also added quick self-assessments for you to consider.
3. Cultural and Ethnic Diversity	This refers to representing various cultural and ethnic backgrounds, ensuring learners are exposed to different perspectives and traditions.	We have included diverse characters from diverse backgrounds. Stories and examples incorporate a range of traditions, customs, and languages. This helps learners appreciate cultural richness and discourages stereotypes by offering balanced views on historical and contemporary issues.
4. Gender Diversity	Gender diversity refers to the representation of all genders and includes discussions around gender roles, non-binary identity, and gender equality.	You will notice equal representation of all genders in text, illustrations, and examples. We've included non-binary and gender-fluid characters, along with activities that challenge traditional gender roles. For instance, both boys and girls are shown engaging in diverse career paths, from helping in the kitchen to science and arts, promoting gender equality.
5. Socioeconomic Diversity	This involves representing people from different economic backgrounds and discussing issues of economic inequality.	We feature characters from a variety of socioeconomic contexts, highlighting challenges like access to education, healthcare, and resources. This allows learners to engage with real-life examples and discussions that reflect diverse economic situations, making the content relatable to all.
6. Linguistic Diversity	Linguistic diversity means including multiple languages and respecting the various dialects spoken by different communities.	You will find content that features multiple languages and encourages learners to respect different dialects. We've also included examples that highlight the importance of translation and interpretation, especially in a global village, preparing learners to be more inclusive in their communication.

7. Sexual Orientation and LGBTQ+ Inclusion	LGBTQ+ stands for Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and others. The "+" represents inclusivity of other sexual orientations, gender identities, and expressions beyond those explicitly listed, such as non-binary, pansexual, asexual, and gender-fluid individuals. This term is used to encompass a broad spectrum of sexual and gender identities, promoting acceptance and inclusion for all.	LGBTQ+ family structures are represented throughout the books, offering a diverse perspective. We've included examples and scenarios that explore LGBTQ+ issues and rights, as well as discussions on anti-discrimination, helping learners understand and respect diversity in sexual orientation.
8. Religious and Spiritual Diversity	This involves representing a variety of religious beliefs and promoting respect for different spiritual practices.	Our books contain content that introduces learners to various religions and spiritual practices. We've also encouraged interfaith dialogue to help foster respect and understanding across different belief systems. Similar perspectives are included as well, ensuring all belief systems are respected and presented fairly.
9. Age Diversity	Age diversity involves including people from different age groups and discussing issues related to aging.	In the books, you'll find characters and examples ranging from young children to the elderly. We've highlighted the importance of intergenerational relationships, as well as discussed age-related topics like retirement and ageism. This helps learners understand the value of every age group in society.
10. Geographic Diversity	Geographic diversity represents people and issues from various regions and environments, both global and local.	The books include content from different regions around the world, addressing both global issues and local contexts that are relevant to learners. We've also balanced examples from urban and rural settings, showcasing the unique challenges and benefits of each environment.

## 10. Creating an inclusive and diverse classroom environment

### 10.1. Diversity in the classroom

Strategies 1 – 10: Building a positive and inclusive classroom environment

#### 1. Create a safe space:

Make sure your classroom is a place where learners feel physically, emotionally, and mentally secure. Encourage them to ask questions, be curious, and support each other through peer learning. Do not give answers or hints. Allow learners to be creative and think about their answers.

**2. Set clear, respectful rules:**

Foster an environment of mutual respect and trust by setting clear classroom rules. When everyone knows what's expected, the classroom becomes a positive space for all.

**3. Celebrate good behaviour:**

Focus on positive behaviour by praising learners whenever possible. Encourage learners to be helpful and considerate as this will lead to more of it!

**4. No teasing or bullying:**

Ensure that your classroom is a bullying-free zone, where every learner's voice matters, and they feel valued and included.

**5. Respectful communication:**

Set the standard for respectful listening and speaking. Only one person speaks at a time, and everyone listens carefully. It's about teamwork! Reinforce this when learners are taking part in Paired Programming and Cooperative Learning activities.

**6. Encourage shared laughter:**

Let learners laugh together but not at each other. Building a sense of community through shared joy strengthens the classroom dynamic.

**7. Build team relationships:**

Create strong connections between you and the learners and their guardians/parents. Encourage learners to participate in group tasks respectfully considering each other's needs. Everyone working together leads to the best outcomes for your learners.

**8. Embrace different learning styles:**

Be mindful that every learner has their own way of learning. Produce and include learning tasks for learners' individual learning differences. Support and nurture these differences. Allow different answers. Learners must test their answers and discuss if it is correct.

**9. Promote peer learning:**

Encourage learners to learn from one another, as learners complete Paired Programming and Cooperative Learning tasks. This builds confidence and cooperation in your classroom.

**10. Introduce peer tutoring:**

Help learners become tutors themselves by guiding them in peer tutoring. It's a fun and effective way to reinforce knowledge and leadership.

## 10.2. Celebrate every learner's uniqueness

It is important to celebrate every learner's unique learning journey. Each child possesses distinct abilities, learning styles, and cognitive strengths. To effectively support all learners, educators must create differentiated lesson activities that cater to these individual differences. By considering how learners process information, their preferred methods of engagement, and their varying levels of understanding, we can design lessons that are both accessible and challenging. Recognizing and nurturing each learner's learning uniqueness ensures that every child feels valued, supported, and empowered to succeed."

learners should be able to see themselves and their diverse experiences reflected in the classroom. This means showing diversity in physical appearance, languages, identities, cultures, religion, gender, sexual orientation (including LGBTQ+), ages, and cognitive abilities. Our books feature characters from different backgrounds to reflect these varied experiences. We carefully select images, artwork, and content that represent the different people, environments, and realities that make up South Africa and beyond.

We encourage you to do the same in your classroom. Use storytelling to highlight diverse backgrounds, show images of rural and urban settings, and talk about people with different physical abilities, cognitive abilities, and identities, including LGBTQ+. Discuss various religions, ages, and gender diversity, and explore the different economic situations your learners may encounter. Take time to teach about our connections with other countries and people across Africa and the world. By doing this, you help every learner feel seen, valued, and part of the larger global community.

## 11. Pedagogical Approach

Variation theory is a pedagogical approach that focuses on how learners discern and understand critical aspects of a concept by experiencing **variations** in what is being taught. The core idea is that learners grasp a concept more deeply when they are exposed to multiple examples and non-examples that highlight the differences and similarities within a particular subject.

The basic idea of **Variation Theory** is that learners learn better when they see differences and similarities in what is being taught. It suggests that learners cannot fully understand something unless they see it in different ways or situations. By showing both what the concept is and what it is not, learners can focus on what really matters.

In simple terms, **to learn a concept well, the learner needs to see what changes and what stays the same. This helps them notice the important parts of the idea.** As teachers, we can help by showing different examples that highlight these differences, making it easier for learners to understand deeply.

Key aspects of variation theory in teaching and learning include:

**11.1. Focus on Critical Features:** The teacher identifies the essential characteristics of the concept and presents variations that emphasise those features.

**11.2. Patterns of Variation:** The teacher uses different patterns to help learners see what varies and what remains constant. These patterns include:

- **Contrast:** Presenting opposing examples to highlight differences.
- **Generalisation:** Showing variations within the concept to grasp the broader application.
- **Separation:** Presenting each feature in isolation to focus on its importance.
- **Fusion:** Combining critical features to see how they interact within the concept.

**11.3. Discernment:** By experiencing various examples, learners can discern what aspects are important and develop a deeper understanding of the concept.

## 12. Approach to teaching Coding and Robotics

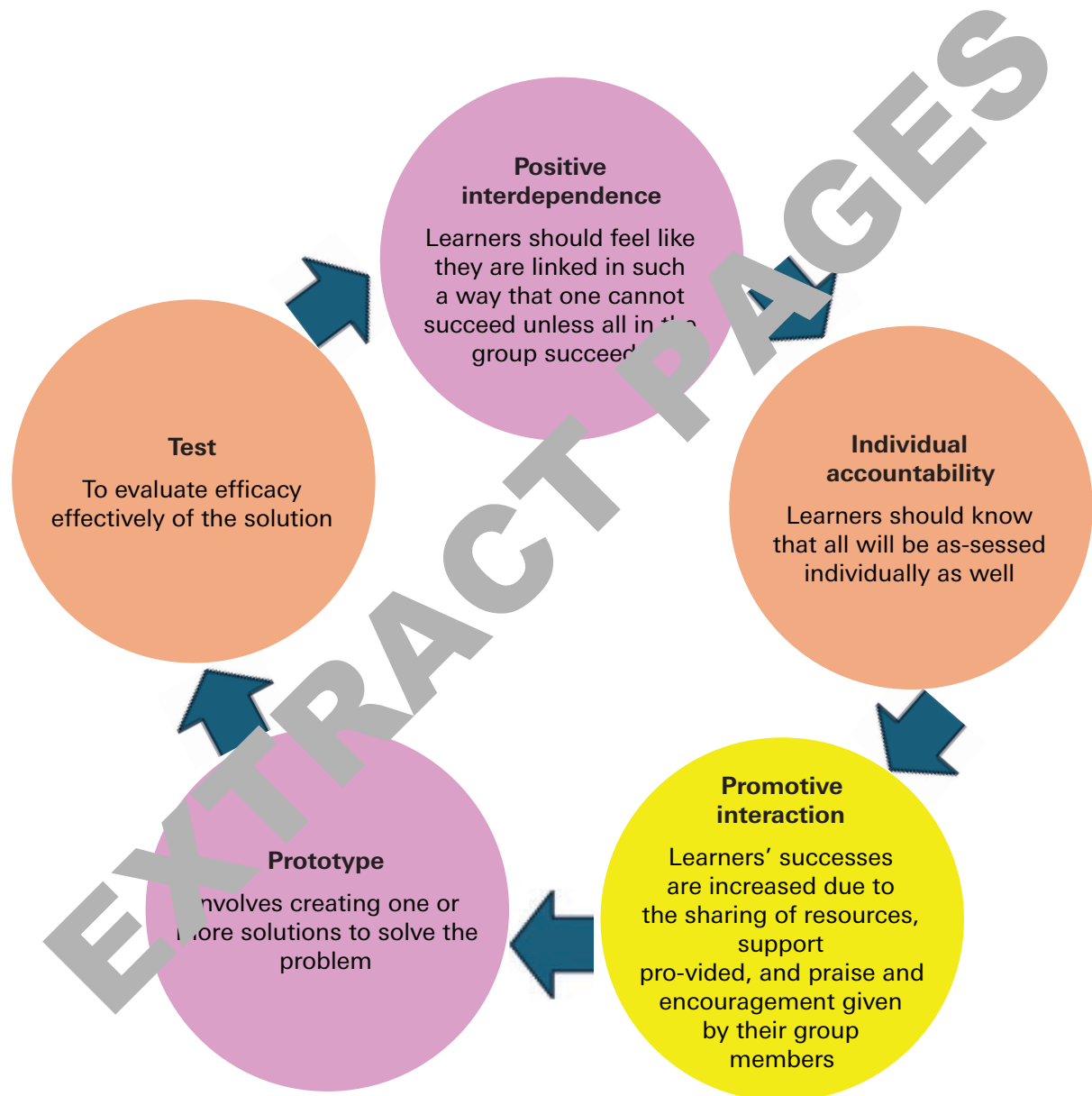
Teaching and learning should adopt a problem-based learning strategy, emphasizing an active, learner-centred approach.

Problem-Based Learning VS Traditional Learning	
Learners work in groups to solve real-world problems. Develop teamwork, communication and research skills. Enhance critical thinking and problem solving abilities.	Teachers deliver instructions. Learners are given information without much effort on their part. Relies on rote learning and memorisation.

### 12.1. Cooperative Learning

Cooperative learning is a teaching method where learners work together in small groups, helping each other learn. This makes learning more enjoyable and helps them improve their skills.

Learning activities and roles are structured and overseen by the teacher, and each member of the group oversees the academic performance of the others. To successfully implement cooperative learning, leading authors in the field (David Johnson and Rodger Johnson) emphasise the intentional stimulation of five basic elements (Johnson & Johnson, 2021:55-56).



## 12.2. Pair Programming

Pair programming is a teaching method where two learners work together to complete a shared task or goal. Pair programming comes from the programming industry. In the schooling context, one learner will fulfill the role of “driver”, and the other learner is the “navigator”.

**Driver = operates the keyboard or writes on paper.**

**Navigator = uses resources and reviews the driver’s work.**

In this series, many grid activities will involve one student acting as the “coder,” who will program the “robot.” The other student will take on the role of the “robot,” following the coder’s instructions.

## 12.3. Deliberate Practice

Coding and robotics require critical thinking, focus, and regular practice. This practice should be purposeful, well-planned, and gradually build on existing knowledge. Deliberate practice involves setting specific goals, getting feedback, and making focused efforts to enhance skills.

## 12.4. Science of Learning

The curriculum is guided by the science of learning, which identifies the best teaching strategies based on evidence that improves long-term retention and enhances learning outcomes.

### Science of Learning

The Science of Learning is an interdisciplinary field that draws on cognitive psychology, neuroscience, and education to understand how people learn. Key principles include:

- **Active Recall:** Retrieving information from memory strengthens learning. In coding, this means learners shouldn’t just passively observe; they should actively try to write code, solve problems, and explain their solutions.
- **Spaced Practice:** Distributing learning over time leads to better long-term retention. In a coding curriculum, this suggests revisiting concepts regularly, rather than cramming everything into one session.
- **Interleaving:** Mixing different concepts during practice enhances learning. For coding, this involves alternating between different types of coding tasks or robotics challenges.

- **Feedback:** Providing timely and specific feedback helps learners identify and correct errors. In coding, this could involve debugging code, receiving constructive criticism on projects, or reflecting on their problem-solving process.
- **Metacognition:** Encouraging learners to think about their own thinking helps them become more effective learners. In coding, this could involve asking learners to explain their strategies, reflect on their successes and failures, and identify areas for improvement.
- **Cognitive Load:** Teachers should be mindful of the amount of information presented to the learners. Lessons should be broken down into smaller, more manageable sections.

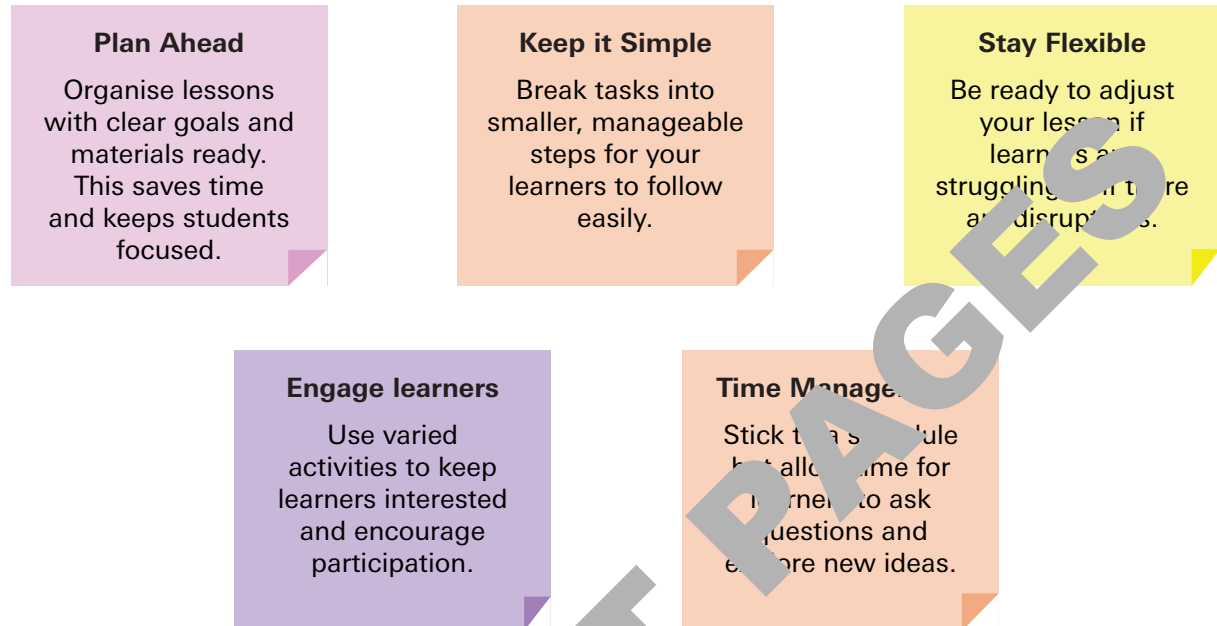
### Relating the Science of Learning to Foundation Phase Coding and Robotics

In the Foundation Phase, these principles are particularly crucial:

1. **Concrete experiences:** Young learners benefit from hands-on activities. Unplugged coding activities (e.g., using coding cards to represent code) and building simple robots provide concrete experiences that support abstract concepts.
2. **Play-Based Learning:** Play is a powerful tool for learning in early childhood. Coding and robotics activities can be designed as games and challenges that engage learners' natural curiosity and creativity.
3. **Visual and Kinesthetic Learning:** Young children often learn best through visual and kinesthetic experiences. Coding cards with colourful visual designs and robotics activities that involve physical movement cater to these learning styles.
4. **Pattern Recognition:** A large part of early coding skills is the ability to recognise patterns. The Foundation Phase heavily focuses on this skill.
5. **Problem Solving:** Coding and robotics naturally lend themselves to problem solving. When a code doesn't work, children are forced to solve problems. Always start with a problem statement.

In essence, these Foundation Phase coding and robotics books demonstrate how the 'science of learning' can be effectively taught by incorporating these principles through the books' hands-on activities, play-based learning, and visual tools. Educators can, therefore, create a more effective and engaging learning experience for their young learners, fostering their interest in coding and robotics and building a strong foundation for future learning.

## 13. Effective lesson management



## 14. Managing large classrooms

Managing large classrooms, common in many schools, can be challenging. Establishing cooperative classroom guidelines helps foster a respectful, inclusive learning community. Involving learners in setting behavior and learning goals promotes ownership of rules and expectations.

### Effective classroom management strategies include:

- **Setting boundaries:** Clearly communicate rules and boundaries from the start and consistently reinforce them.
- **Routine and structure:** Maintaining consistent routines helps manage large classrooms.
- **Peer work:** Pairing or grouping learners fosters peer teaching, collaboration, and shared responsibility.
- **Visual and audio aids:** Use visual aids (posters, hand signals) and audio cues (music, clapping) to reinforce instructions.
- **Differentiated instruction:** Tailor lessons to meet the varying needs of learners in the class.

- It is important to remember that all children are individuals, and it is not possible to generalise understanding and knowledge across all culture and background. Learning is a result of experience. Each learner has their own existing knowledge based on past experiences; each is unique.
- To get the best out of your learners, you need to instil confidence. A confident learner is one who is open to and prepared for challenges and will therefore more easily grasp new concepts.
- Creating a safe environment where learners are willing to take risks and making mistakes is normal and part of the learning process. Allow learners to be successful when they start their journey in learning the core skills included in Foundation Phase English. This means starting at the right level, providing scaffolding, and supporting them as they learn new language and literacy concepts.
- BELIEVE IN YOUR LEARNERS! Each learner must know that someone believes in them, and that they will succeed.

## 15. Using Creative and Sensory Practice in Learning

Incorporating creative activities into daily classroom routines can engage learners and enhance their perception of the learning environment. Music, for example, is used globally to create a positive atmosphere, regulate mood, and support academic development. Research shows that music aids brain processing, speech, and learning retention. If using music, ensure it does not negatively impact learners with sensory or auditory disorders by involving learners in music selection to make it an inclusive experience.

Movement, singing, and chanting can motivate learners and help with retention through repetition, rhyme, and physical activity. These activities add variety to daily routines and make learning enjoyable.

## 16. Alternative environment

Introducing different environments or changing the classroom setup can stimulate learning. Occasionally holding lessons outside or reconfiguring the classroom space can help. If off-campus excursions are not feasible, simple classroom changes, like altering seating arrangements or displaying new materials can keep the environment dynamic.

Excursions, when possible, provide experiential learning opportunities. Always ensure compliance with your school’s guidelines when planning trips. If excursions are not an option, ask parents or the community to contribute objects related to topics being studied to make learning more engaging.

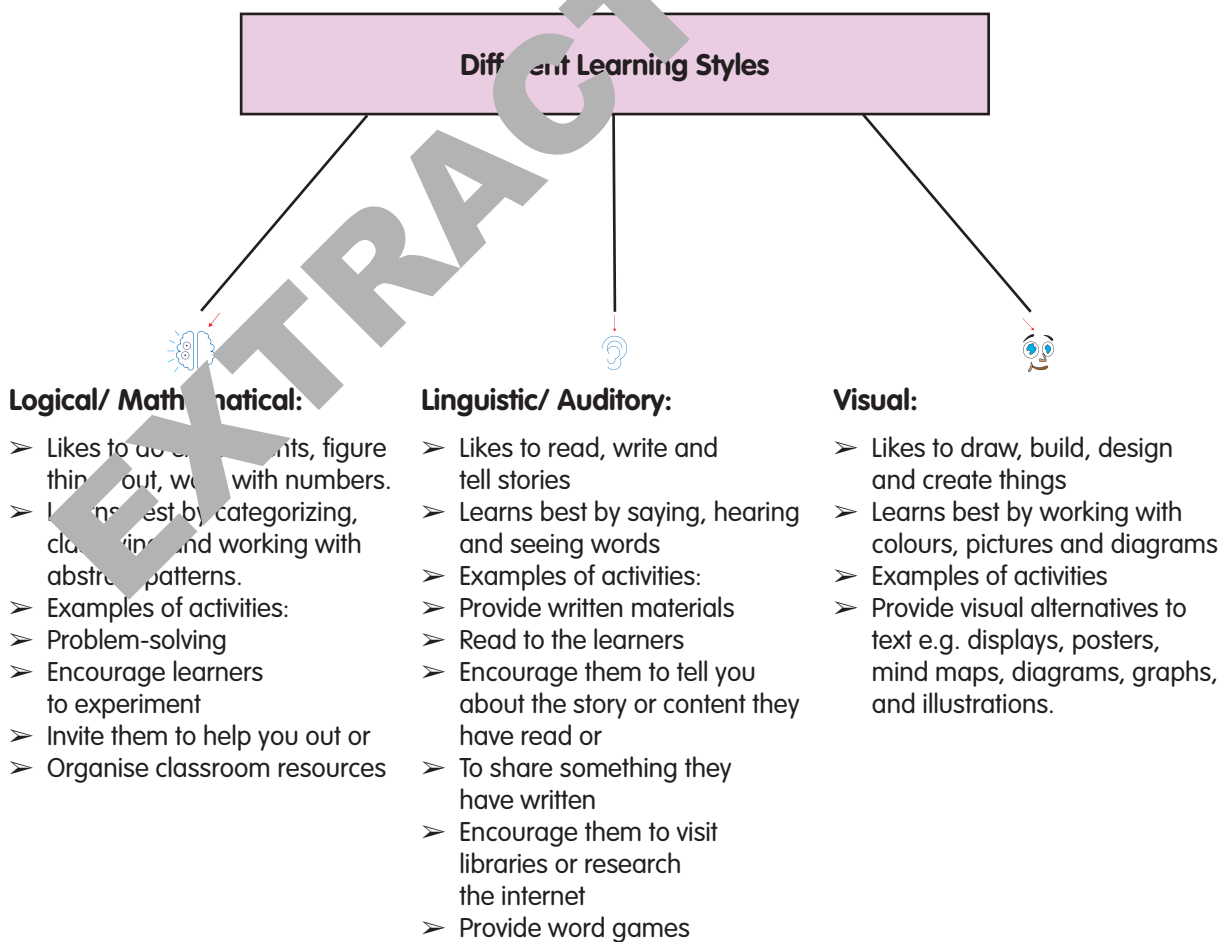
## 17. Supporting various learning styles

### 17.1. Realise that different learners learn differently

We all receive information, process and express information differently depending on our learning style. Keep in mind that in your class there will be learners whose learning style is different from yours.

Talk about different learning styles in the classrooms. Some children prefer to see new information, while others learn better from hearing about it.

If you can address these different learning styles it will maximise the learners’ potentials, improve self-confidence and self-esteem.



## 17.2. Differentiated tasks in our textbook

Differentiated learning in the foundation phase involves adapting teaching strategies and tasks to cater to diverse learning styles. It includes using various tools like drawings, physical activities (placing on the floor), and mirroring techniques to support all learners. The aim is to ensure every child can engage with and understand the material in a way that suits them best.

Differentiated Learning mindmap

Main Branches:

- **Easier Tasks:** Specific adaptations for struggling learners.
  - Simplified Instructions
  - Visual Cues
  - Step-by-Step Guidance
- **Extension Tasks:** Specific adaptations for advanced learners
  - Increased difficulty and complexity
  - Problem-Solving
  - Creative Application
- **Creative and Sensory Practices**
- **Alternative environments**
- **Body movement activities**
- **Coding card activities**
- **Learning Styles:**
  - Visual
  - Kinesthetic,
  - Auditory
- **Coding/Robotics Tasks:**
  - Simple Directions
  - Color Coding
  - Pre-Programmed Robots
  - Storytelling with Robots
  - Obstacle Courses
  - Sequencing Commands
  - Using Sensors
  - Robot Stories
  - Coding Challenges
- **Visual Aids:**
  - Icons (Rocket Robie - TG - is diff icon)
  - Color
  - Diagrams

In the foundation phase, children learn in different ways.

Differentiated learning means we change how we teach to help every child.

### **Ideas for Coding and Robotics Tasks:**

#### **Go from concrete to more abstract tasks when teaching a new skill**

##### **Easier Tasks:**

- **Simple Directions:** Instead of complex coding, start with simple directions like “move forward two steps” or “turn left.” Use physical movements, including coding cards, and large physical boards.
- **Colour Coding:** Use coloured stickers or blocks to represent different commands. Children can arrange them in a sequence to give instructions to a robot or a peer acting as a robot.
- **Storytelling with Robots:** Create a simple story and have the robot act it out based on basic directions.

##### **Extension Tasks:**

- **Creating Obstacle Courses:** Have children design and build obstacle courses for the robots to navigate. This involves planning and problem-solving.
- **Sequencing Multiple Commands:** Introduce longer sequences of commands and have children piece together the robot’s path.
- **Using Sensors:** If available, explore robots with sensors (light, sound, touch). Children can program the robot to react to different stimuli.
- **Creating Robot Stories:** Write or draw stories and then code the robot to act out the story, adding complexity to the movements and interactions.
- **Coding Challenges:** Set challenges like “Make the robot draw a square” or “Make the robot reach a specific point.” This encourages problem-solving and logical thinking.

## 18. Teacher Wellness

Teaching is a high stress career for many professionals. Not only is it a demanding career, with many resourcing challenges, it can also present many dangers in a country with high levels of crime and violence. For these reasons it is imperative that you have systems in place to take care of yourself, decompress and process their experiences and concerns.

### Mindfulness and meditation

Take a few minutes each day to relax by practicing mindfulness. Breathing exercises and calming your thoughts can help reduce stress. Free resources for meditation are available online and can be done in your classroom during quiet time.

### Build supportive communities

Join or create a group of fellow teachers for support and learning. Sharing experiences with others can help you manage the challenges of teaching and offer new perspectives.

### Healthy Lifestyle

Maintain a balanced diet, stay physically active, and look after your voice. Simple daily habits like staying hydrated, eating nutritious meals, and exercising regularly will keep your energy levels up and protect your health.

### Mental and emotional health

Teaching young vulnerable children can be emotionally demanding. It's important to have a safe space or outlet where you can talk about your responsibilities and process the mental load of your role.

## 19. Assessment

Assessment encompasses a variety of methods used to gauge learner progress and understanding in math. It's not just about tests—it's about exploring how well learners grasp concepts and apply their skills. Continuous assessment of foundation phase learners facilitates ongoing monitoring of learner progress and teaching outputs. It allows you to evaluate your methods and learner progression and make appropriate, daily instructional decisions. Assessments should be naturally integrated into the teaching and learning process using engaging, fun and encouraging methods to elicit active participation from learners.

Assessment includes various methods to measure learners progress and understanding. Regular assessments help you see how well learners grasp concepts and apply their skills. In the foundation phase, continuous assessment allows for ongoing monitoring of learner progress and teaching effectiveness. This enables you to evaluate your teaching methods and learner growth, helping you make informed, daily instructional decisions.

### 19.1. Assessment for learning

Assessment for learning is naturally integrated into your teaching process, where fun, engaging, and supportive methods encourage active participation from learners. It helps identify where learners need more support and guides your instruction to meet their needs.

<b>Observe during activities</b> Watch how learners approach tasks and ask guiding questions to support them.	<b>Thumbs up, thumbs Down</b> Use this after a lesson as a quick check of learners' understanding.	<b>Self assessment</b> Learners draw a robot face that matches their feelings about how well they did the activity.	<b>Pair programming</b> Learners think individually, discuss with a friend, and then share with the class to assess understanding.
<b>Peer feedback</b> Learners share work with classmates and give simple constructive feedback to reflect on their work.	<b>Whole body activities</b> Fun, collaborative tasks allow you to observe abilities in real time.	<b>Questioning during lessons</b> Use open-ended questions to encourage learners to explain their thinking and reasoning.	

### 19.2. Assessment as learning

**Assessment as learning** involves learners reflecting on their progress, encouraging them to take responsibility for their own learning. Through this, they actively assess their own understanding, which promotes deeper learning and self-awareness.

### 19.3 Assessment of learning

Assessment of learning provides you with evidence of learner achievement at specific points in time, helping you gauge overall progress and make informed decisions about their progression.

### 19.4 Guidelines for Assessment

Guidelines for assessing skills and competencies in Coding and Robotics for the Foundation Phase are provided. The guidelines for evaluating practical and theoretical competencies for each term are included in the e-planner on page 159.

## 20. Rating code

RATING CODE	DESCRIPTION OF COMPETENCE	PERCENTAGE
7	Outstanding achievement	80 – 100
6	Meritorious achievement	70 – 79
5	Substantial achievement	60 – 69
4	Adequate achievement	50 – 59
3	Moderate achievement	40 – 49
2	Elementary achievement	30 – 39
1	Not achieved	0 – 29

## 21. Suggested Teaching Plan:

### Grade 1 Teaching Plan

Term	Topic	Competencies
1.	I can make patterns	C6 R5
2.	Different robots	R1 R2 R5
3.	All about me	D2
4.	Living in a digital world	D3

5.	My robot	R1 R5
6.	Healthy living	C2 C3
7.	My patterns	C6
8.	Move until you hit the barrier	C2 C3
9.	Solve the problem	C1 C2 C3
10.	Sort me	C1 C2

**Term 2:**

<b>Week</b>	<b>Topic</b>	<b>Competencies</b>
1.	Recognising patterns	C1 C6
2.	Building a house	R5
3.	Being safe online	C3 D1 D2 D3
4.	Input – process - output	D7
5.	Robot's instructions	C3 R1 R2 C6
6.	Find it	C2
7.	Robots help people	R1 R2
8.	Follow your senses	C2
9.		R5 D1
10.	Keeping my body safe	C2

**Term 3:**

Week	Topic	Competencies
1.	Helping Zaza	C3 C4
2.	The park	C1 C3 C4
3.	Pets	C2 R6
4.	A model of my pet	C3 R5
5.	Keeping safe	R6 D2
6.	Help Aiden make the right choice	R1 R3 D1 D6
7.	Breaking the code	D8
8.	Let us help Kody	C1 C2
9.	Food and colours	C3 C7 R6
10.	My plant	C1 C4

**Term 4:**

Week	Topic	Competencies
1.	My friend's home	C1
2.	Find the way home	C3 C4
3.	What do the messages say?	D8
4.	Parts of a robot	C3 R3
5.	Find the paths to public places	C2 C3 R7
6.	Help Kody find the park	C2 C3 C4
7.	Robots at work	C3

8.	Filtering water	R5 D1
9.	How do we communicate?	D8
10.	The stars at night	C7

EXTRACT PAGES

## 22. Suggested Intervention Strategies

Coding and Robotics are best introduced through unplugged, hands-on activities that make learning fun and engaging. The first “rule” for teaching Coding and Robotics, is to ensure both you and the learners enjoy the experience. Research shows that people retain information more effectively when they learn in a fun, interactive, and iterative way. Whole-body activities make learning enjoyable and are essential for retention. If children aren’t having fun, they’re less likely to remember what they’ve learned.

### Unplugged coding:

- Unplugged coding involves facilitating lessons in a fun and interactive manner without relying on digital devices.
- Since Coding and Robotics heavily emphasise directionality, incorporating whole-body movements is highly recommended to reinforce learning.
- Start by having learners create their own rocket using the template provided at the back of their book. Encourage them to keep this rocket safe, as it will be their “coding companion” for the entire year—a tool they’ll use regularly to practice and reinforce directional skills.

### How to colour the rocket:



### How to use the rocket:

- Before starting any grid activity, especially in Grade 1 and at the start of a new term, have the learners stand with the rocket in their hands.
- Red facing forward, instruct them to move in the direction that you are instructing them to go.

- Later in the year, or in a higher grade, learners can also do the task of being the “coder” by instructing the rest of the class in which direction to go.
- This should be a short practice of about 2 minutes.

**TIP:** Do as many grid activities as possible on the playground or tarmac by creating big grids with masking tape or chalk. If this is not possible, create a grid on the classroom mat.

- To reinforce directionality, tie a string around each learner’s right wrist.
- This simple tool helps them identify their right side, supporting their ability to distinguish left from right over time.

**TIP:** Use a yellow string to tie to their right wrist, this will help them to remember the directional arrows.

## Dance!

- Dancing is a fantastic way to introduce concepts like algorithms, loops, sequences, and even debugging!
- Look for songs with step-by-step instructions in the lyrics, or try line dancing activities.
- This approach energizes learners, making the lesson socially interactive, enjoyable, iterative, and inclusive for everyone—including you, the teacher!

## Games!

Playing simple games in the classroom is a valuable tool when teaching Coding and Robotics.

- “Simon says”
- Hopscotch
- Wheelbarrow walking
- Ladder
- Dribblestokkies

## Prior knowledge:

When introducing a new concept, start with what learners already know. This helps them connect familiar ideas to new concepts. Here are some activity ideas:

- For transportation, start with examples like taxis, cars, buses, and trains.

- To introduce algorithms and coding, use everyday tasks like cooking, washing clothes, or brushing teeth.
- When using cooking examples, choose familiar South African foods, like making vetkoek (amagwinya) or samp and beans (umgqusho).

### **Authentic connections:**

When learners learn through real-life scenarios, they experience authentic connections. This means that they will find it easier to recognise how Coding and Robotics is relevant to their daily lives. When they travel from their homes to the school, they are using an algorithm, a code to get from point A to point B.

- Here are some examples of possible activities:
- Code a friend
- Making tea
- Walking to school
- Taking public transport to school/home
- Making porridge
- Sweeping with a broom

### **Concrete – Pictorial – Abstract :**

When teaching a new concept, start with real, concrete examples. Next, use pictures or photos, and only then move on to more abstract ideas.

Examples:

- **Pattern Recognition:** Show learners real-life patterns in the classroom, playground, or community.
- Provide them with objects to create patterns, like bottle tops, counters, beads, paper strips, playdough, or even fruits and vegetables.
- Let them make patterns with their bodies (like boy, girl, boy, girl) or with clothing items, like socks or shoes.

### **Scaffolding:**

Allowing learners to progress at their own pace reduces anxiety, fostering a confident and relaxed classroom environment. Implementing the “I do, We do, You do” strategy is particularly effective in supporting learners who face challenges.

Begin with a smaller grid, e.g., 2 x 2 or 3 x 3 to ease learners into working with grids.

Furthermore, activities such as drawing with your finger using paint from the left side to the right side of an A3 or A4 page and from the bottom to the top of the page will assist learners with directionality as well as midline crossing.

You will also find the directionality template at the back of the learner book. Provide each learner with blue, red, orange and yellow paint. They dip their finger in the red paint and draw a line to the top of the arrow. They do this for all the directions and colours.

EXTRACT PAGES

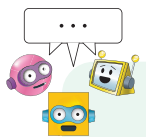
# Term 1 Week 1: I can make patterns

Focus areas	Coding Robotics
<b>Note to the teacher</b>	<ul style="list-style-type: none"> <li>• <b>Mirror the learners:</b> When doing whole body movements, stand with your back facing the learners for activities 1 b and c.</li> <li>• Do as many whole body pattern activities as possible.</li> <li>• Give learners more patterns with simple shapes or objects.</li> <li>• Learners vocally identify/ <u>read</u> the shapes from left to right (the same as a learner will learn to read a word or sentence from left to right). This is an important aspect to relay to the learners for them to fully grasp and UNDERSTAND the characteristics of a pattern. <b>Read – revise – complete – read.</b></li> </ul>
Recommended resources	
<b>Let us begin</b>	- Learner Book
<b>Activity 1</b>	- Learner book - Full body activities
<b>Activity 2</b>	<ul style="list-style-type: none"> <li>- String 15 cm per learner</li> <li>- Beads of different colours</li> <li>- 8 beads per learner (different colours x 4 of each colour)</li> <li>- <b>Alternative materials:</b></li> <li>- Rope, ribbon, wool or nylon.</li> <li>- Paper discs and make holes in the middle with skewer.</li> <li>- Buttons.</li> <li>- Milk bottle tops and make holes in the middle.</li> <li>- Learners can also mark their chair bags, hooks on the wall or any bag etc.</li> </ul>
<b>Competencies</b>	5
<b>Skills</b>	<p><b>Learners will learn to:</b></p> <ul style="list-style-type: none"> <li>• Recognise and interpret a pattern</li> </ul>
<b>Knowledge</b>	<p><b>They will do this by:</b></p> <ul style="list-style-type: none"> <li>• Following clear instructions and creating a bag tag</li> </ul>

**Did you know?**

Learners will be empowered with competencies for Coding and Robotics when we teach, practice, and instill in them the skill of critical thinking. Be sure to try to create an environment of teaching where creative thinking, communication, collaboration, and computational thinking are exercised and motivated to instill good character in each learner.

**Problem:**



**Let us begin**

- Start by having learners use real objects or pictures to create patterns they can touch and see.
- Introduce the learners to the concepts of a sequence and a pattern.

**Sequence**

sequence



**Pattern**





## Activity 1

Term 1 LB pg 1

### Activity guidance: Let us make patterns



- Look at the patterns:
  - Ask the learners to clap twice, once, twice, once, twice, once, twice, once
  - Can you see the pattern?
  - Can you hear the pattern?
  - Ask the learners to copy the robots' arm movements.
  - Ask the learners to follow the arrows by moving their heads. Right, up, down - repeat two more times.
  - Can you see the pattern?



- Find the **sequence**.
  - Ask learners to look at the patterns in their book.
  - Copy the pattern in your book.



- Now look at the shapes.

#### Questions to ask:

- Is it a pattern?
- Why do you say so?

#### Suggested additional activities

- Show learners additional examples of patterns and allow them to copy the patterns in their exercise books.

#### Solutions

##### Activity 1

- a. one orange circle, two yellow circles



- b. two green triangles, 1 blue square



3. No, it has two blue circles and one red square.



- b. yes



## New words

**sequence:** the order in which objects follow one another.

**pattern:** a sequence that repeats again and again.

## Activity 2

Term 1 pg 2



## Activity guidance: Help Tumi to make a tag for her bag

- Start the lesson by giving the problem to the learners.
- Follow the activity with learners in the classroom.
- Each learner must have enough space where they can arrange their beads and can comfortably create their own bag tag.
- As a class, identify and discuss patterns using different colours. They can start by using any physical objects, symbols, or drawings. For example, blue—green, blue—green, blue—green.
- **Groups:** Arrange the learners in groups of 6 - 8.
- **Bowl of beads:** Place a plastic bowl with mixed coloured beads in the middle of each table.
- **Select:** Learners pick two colour beads from the bowl.
- **Bead Distribution:**
  - In the one hand, the learner takes 4 of the same colour beads.
  - In the other hand, the learner takes 4 of the same colour beads.
  - **Encourage individuality:** Encourage learners to choose different colour beads from their friend next to them.
  - **Assist:** Assist learners through the process without giving them the answers.
  - Allow learners to have discussions with each other as they go through this process.

## Questions to ask

- What was the instruction? What must you do?
- Which colours did you choose?
- Why did you choose those 2 colours?



**Suggested additional activities**

- Help learners to attach their tags to their school bag.
- Encourage learners to identify their friends tags and participate in conversation.
- Learners must be able to identify 2 learners' patterns out loud.
- Learners use shapes (can also be cut-out shapes) and copy and extend the pattern on their table by sequencing the shapes in the correct order.

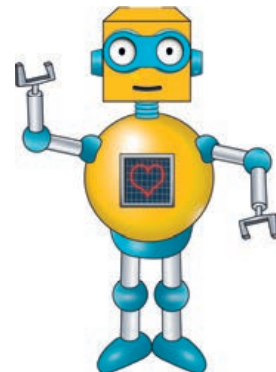
EXTRACT PAGES

# Term 1 Week 2: Different robots

Focus area	Coding
<b>Note to the teacher</b>	<ul style="list-style-type: none"> <li>• <b>Tip:</b> Does anyone in your family work in a factory or warehouse? Ask the learners what the robots in their factory or warehouse does.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Find someone who works in a factory or warehouse. Ask them what the robots in their factory or warehouse does.</li> <li>• Report back with our next lesson</li> </ul>
<b>Recommended resources</b>	
<b>Let us begin</b>	- Learner book
<b>Activity 1</b>	<ul style="list-style-type: none"> <li>- Learner book</li> <li>- Exercise book</li> <li>- <b>Alternative materials</b></li> <li>- Magazines to find pictures of robots</li> <li>- Photos of a broom, an ordinary vacuum cleaner, a forklift, a screwdriver, a drill</li> </ul>
<b>Activity 2</b>	<ul style="list-style-type: none"> <li>- Learner book</li> <li>- Crayons/colour pencils</li> <li>- Exercise book and paper</li> </ul>
<b>Competencies</b>	<b>R1 R2 R5</b>
<b>Skills</b>	<p><b>The learners will learn to:</b></p> <ul style="list-style-type: none"> <li>- To identify that all robots are different and have a specific purpose.</li> <li>- To describe how they are different from each other.</li> <li>- To draw their own robot.</li> </ul>
<b>Knowledge</b>	<p><b>They will do this by:</b></p> <ul style="list-style-type: none"> <li>- Explaining what a robot is in basic terms.</li> <li>• Drawing their own robot.</li> </ul>

## Did you know?

Learners live in a world where robots are being used more and more. They need to understand their differences.





How do robots help people?



### Let us begin

#### What is a robot?

- Introduce what a robot is by telling the learners to look at the pictures in their learner book.
- Explain that a robot is a machine that can do things on its own.

## Activity 1



(Term 1 LB pg 5)

## Let us talk about robots

## Activity guidance



- Divide the learners into groups of 6-8.
- Ask the groups to look at the photos of the different robots in the LB.
- **Talking points to cover**
  - a. The windows cleaner robot cleans the windows. Before we had robots, we used people to clean the windows.
  - b. The warehouse robot is lifting and moving boxes off shelves to send to customers. Before we had robots, we had to use the muscles in our bodies or a forklift.
  - c. The factory robots are building cars. Before we had robots, we used to put cars together with their hands and hand-held tools such as hammers and screwdrivers.
  - d. The drones help to inspect building work. Before we had robots, people had to climb up and look down on building work or take photos from the ground.



## Questions to ask:

- What work is each robot doing?
- How does each robot help humans?
- How do humans do the job before there were robots?

## Suggested additional activities

- Movement discussion
- Divide learners into groups
- Ask them to discuss how each robot moves.
  - a. The window cleaning robot has special suction cups that help it to stick to the window. It has tiny wheels that help it to move on the window. It uses brushes and sponges to clean the window.
  - b. The warehouse robot has an arm that can move up and down and backwards and forwards. It has a hand that can pick up a box and move it from one place to another.
  - c. The factory robots have arms that can move up and down and forwards and backwards. They have tools on the end of the arms that can attach different parts of the car together.
  - d. A drone has propellers so that it can fly up and down, and forwards, backwards and sideways at different speeds. It has a video camera underneath so it can film what is below it. The person controlling the drone has a screen on which they can see what the drone sees.

**New words**

**robot:** A robot is a machine that can do things on its own.  
**machine:** a machine is something that makes work easier.

**Activity 2**

(Term 1 LB pg 6)

**Draw your own robot**

**Activity guidance**



- Look at the rubbish.
  - Ask the learners to describe the problem they see in each photo. There are overflowing bin bags of rubbish in the street.
  - Divide the learners into pairs. Ask the pairs to talk about what they will design to solve the rubbish problem.
1. Ask the pairs to design a bin that can help to solve the problem.



**Questions to ask:**

- What will your bin look like?
2. Ask the pairs to draw the steps of how they are going to build their bin.
  3. Ask three pairs to join to make groups of six learners. Each pair presents their bin design to the group. The presentation must include:
    - What the problem is.
    - The drawing of their bin
    - How their bin solves the problem.

**Suggested additional activities**

- Ask the class to compare their bins. How are they the same? How are they different?

# Term 1 Week 3: All about me

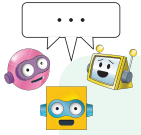
Study area	Digital concepts Coding
<b>Note to the teacher</b>	<ul style="list-style-type: none"> <li><b>TIP:</b> Add any new rules based on the pictures to the list of Classroom Rules.</li> </ul>
<b>Recommended resources</b>	
<b>Let us begin</b>	- Learner book
<b>Activity 1</b>	- Learner book
<b>Activity 2</b>	<ul style="list-style-type: none"> <li>- Learner Book</li> <li>- Exercise books</li> <li>- Drawing materials</li> </ul>
<b>Competencies</b>	<b>D2</b>
<b>Skills</b>	<b>Learners will learn to:</b> <ul style="list-style-type: none"> <li>• Choose the correct action</li> <li>• Identify good behaviour</li> <li>• Identify different types of personal information</li> </ul>
<b>Knowledge</b>	<b>They will do this by:</b> <ul style="list-style-type: none"> <li>• Pointing out good behaviour from misbehaviour.</li> <li>• Creating an ID card with their personal information.</li> </ul>

## Did you know?

Learners who are held accountable for their choices and actions will be more careful about what they do and say. Learners need to be able to take responsibility for their choices.

How should I  
behave when I use  
a **device**?





## Let us begin

Term 1 LB pg 7

- Ask learners to look at the pictures in the learner book
- They should then identify acceptable or unacceptable behaviour in the classroom?
  - If it is acceptable behaviour, show a thumbs up 👍.
  - If it is unacceptable behaviour, show a thumbs down 👎.
- 👍 Acceptable behaviour 👍: throwing paper in the bin, raising your hand to ask or answer a question.
- 👎 Unacceptable behaviour 👎: sneezing without covering your mouth tearing



## Activity 1



(Term 1 LB pg 8)

How are treating each other?

## Activity guidance



- Divide the learners into pairs. Ask the pairs to look at the four pictures in the Learner Book.

## Questions to ask:

- What do you see in each picture?
- Make sure learners describe each picture completely and give their opinions on whether the behaviour is acceptable or unacceptable.
  - Do you all have the same rules about digital devices at home?
  - What do you think of the rules at your homes?



- How should we behave when spending time with family and friends?

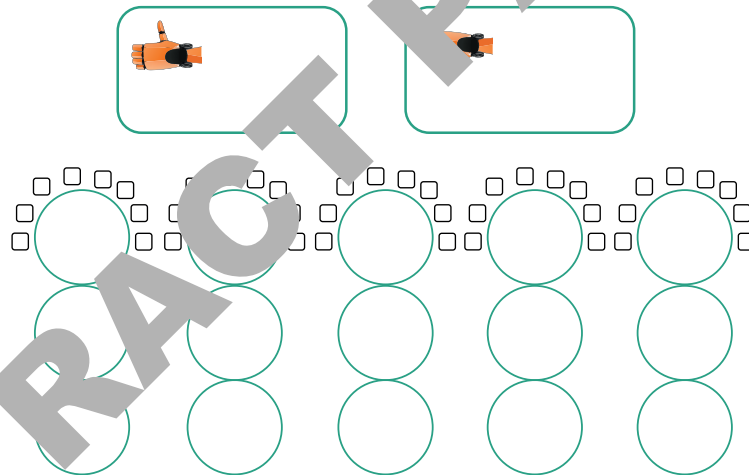
## Suggested additional activities

## Behaviour Roleplays

- Divide the learners into groups of four. Give each group one of the pictures from Activity 1.
- Ask the groups to create a roleplay of the behaviour in their picture. Give them time to practice.
- Ask the groups to perform their roleplays for the class.
- After each performance discuss the behaviour with the class.

**Behaviour Hula Hoop Hop**

- Take the learners, the hula hoops, the pictures of acceptable and unacceptable behaviours, the Prestik and the two boards outside or to an open space.
- Set out five sets of three hula hoops as shown below. Put eight behaviour pictures upside down around the last hoop in each set (four of acceptable behaviour and four of unacceptable behaviour).
- Divide the learners into five groups. Ask the groups to line up in front of their first hoop.
  - 1 The first learner in each group hops or jumps into each of the three hoops.
  - 1 In the last hoop, the learner chooses one of the upside-down pictures.
  - 1 They turn it over and show it to their group while describing the behaviour.
  - 1 The group decides whether it is acceptable or unacceptable behaviour.
  - 1 The learner hops or jumps to stick the picture on the correct board.
  - 1 The next learner repeats these actions until all the behaviour pictures are on the boards.
- Go through the pictures on the boards. Check that they are all on the correct board.
- Ask the learners if the pictures have reminded them of any classroom rules, they want to add to the lists of Classroom Rules and Digital World Rules. Add any rules to each list.



**New words**

**Personal information:** a secret about you that tells people who you are, like your name and home address.

## Activity 2

(Term 1 LB page 9)



### Activity guidance

- Ask the learners what they think personal information is.
- List any correct answers on a big piece of paper or a board under the heading 'Personal information'.
- Ask the learners if they know what an ID card is. Make sure they understand that ID is the short way of saying identity and an ID card lists a person's personal information.
- Divide the learners into pairs. Ask the pairs to look at the two pictures of identity (ID) cards in the learner book. Read the personal information on each card together.
  - Ask them to talk about why an ID card has the person's photo on it.
  - Ask the pairs to report back on their discussions.
- Read the rules under the ID cards. Ask the pairs to talk about the questions:
  - Why should you not tell people you do not know where you live or where you go to school?
  - Why should you keep your personal information private?
  - How can you do that in the every-day, real world and online in the digital world?
- Ask the pairs to report back on their discussions and if they want to add anymore rules to their lists.
- Ask the learners to ask an adult at home to show them their ID card.

### Suggested additional activities

#### Real World Roleplay

- Divide learners into pairs.
- Give each pair a scenario about personal safety in the real world (a stranger comes up to you at the shop and asks you what your name is, your age and where you live)
- One learner will play the role of the stranger and the other plays the role of the child.
- Ask the pairs to act their role play for the class. After each roleplay, ask the class if the child protected their personal information or not.

#### Digital World Roleplay

- Give each pair a scenario about personal safety in the digital world (An online stranger says they want to take you out for ice-cream so they ask for your address so that they can come to pick you up with their car.)
- One learner will play the role of the stranger and the other plays the role of the child.
- Ask the pairs to act their roleplay for the class. After each roleplay, ask the class if the child protected their personal information or not.

#### Solution

- 👉 Telling people where you live.
- 👉 Sharing your location online.
- 👉 Telling a stranger where you go to school.
- 👉 Posting pictures in front of your school.