

Coding and Robotics

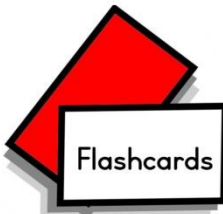
Grade R

Term I

Teacher's Guide



FUTUREKIDS®

Table of symbols			
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	Week		Activity
	Flashcard words		Example
	Content		Code
	Pattern recognition		Algorithm and coding
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Coding and Robotics– Term 1

CRGITITIWI	Week 1: All about Myself
CRGITITIW2	Week 2: At School
CRGITITIW3	Week 3: In the Classroom
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CRGITIT3W6	Week 6: Healthy Habits
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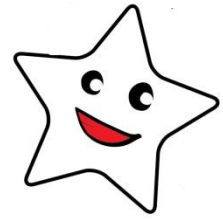
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SAMPLE

Week 1: All about Myself



Pattern Recognition



Flashcards

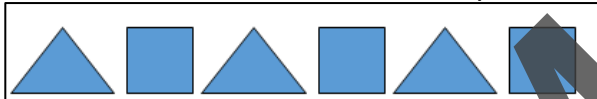
shape		colour	
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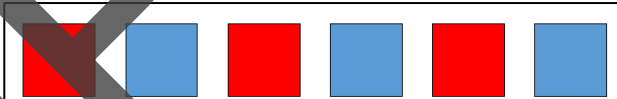
Patterns

Patterns are two or more things that repeat in an order.
We can make patterns using shapes or colour.

Patterns made using **shapes**:



Patterns made using **colour**:

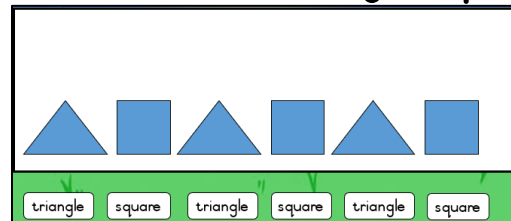


Let's make some patterns:

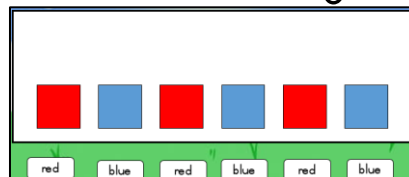
Patterns made using **children**:



Patterns made using **shapes**:

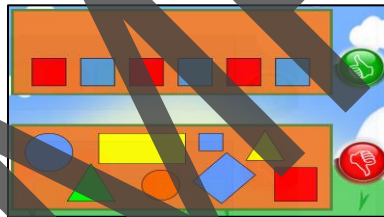
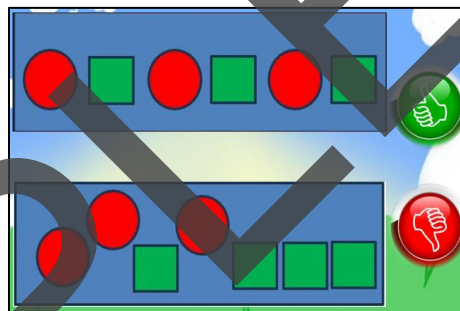
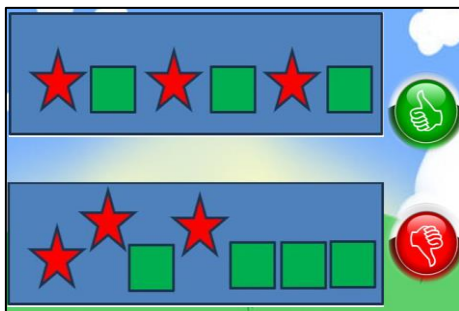
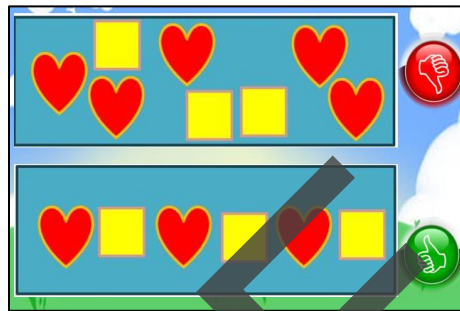
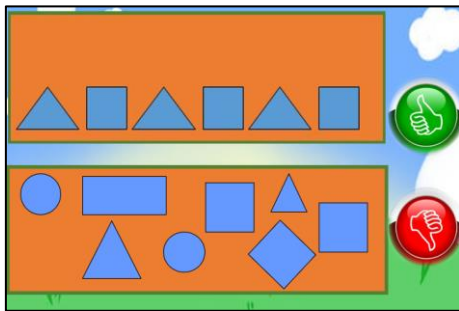


Patterns made using **colour**:



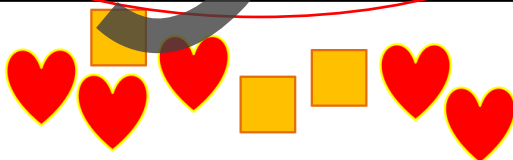
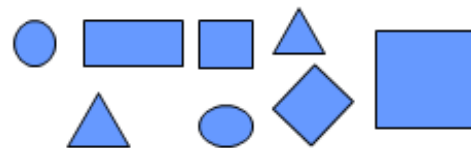
Pattern questions: (PowerPoint script)

Learners must select the picture that makes a pattern.



Activity:

I. Circle the pattern.





Algorithms & Coding



Flashcards

wake up		breakfast	
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Sequence (PowerPoint script)

What is a sequence?

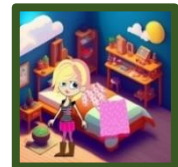
A sequence is a series of actions performed in a specific order.

A sequence can be something we do every day like our morning activities. Let's look at our daily sequence.

First, we **wake up**.



Then we **get dressed**.



Then we **eat breakfast**.



We can also make a sandwich in the morning. Let's have a look.

First, we get the bread.



Then we put jam on our bread.



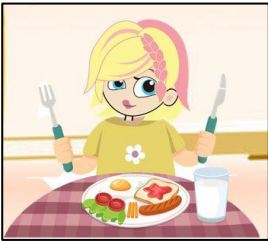
Then we eat our bread.





Activity:

2. Look at the following pictures: Number the pictures in the correct order from 1-3

	2		3		1
	3		1		2



Robotics



Flashcards

robot		people	
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Robots

What is a robot?

Robots are built by people.

Robots are machines.

They are not alive.

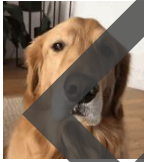
Robots can be programmed, or given instructions to, by people.

Robots follow instructions.

Some robots look like humans.

Some robots do not look like humans.

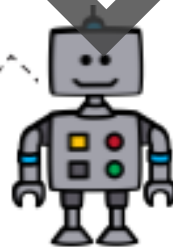
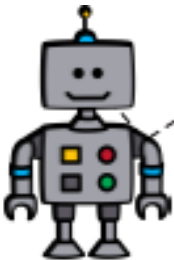
Robot questions: Learners must select the robot. (PowerPoint script)

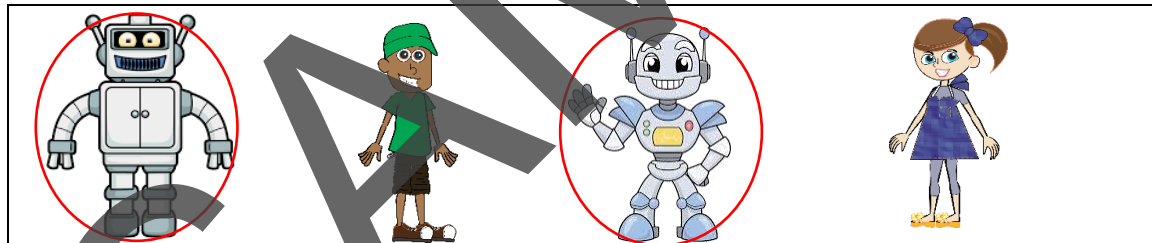


Activity 3:

3. Trace the following shape.



4. Circle the robots.



Digital Concepts

Learners learn how to identify a robot.

Week 2: Me and my School

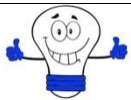


Pattern Recognition



Flashcards

objects			
school		bus	



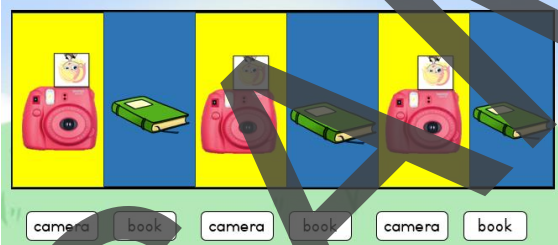
Patterns (PowerPoint script)

Patterns are fun!

Patterns are two or more things that repeat in an order.

We can find many patterns at school!

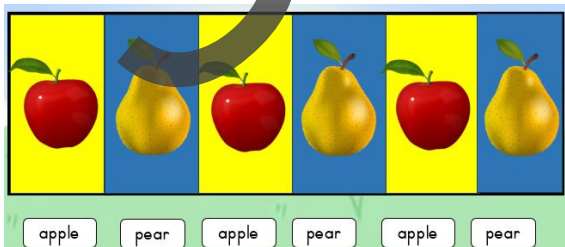
Patterns made using **objects**:



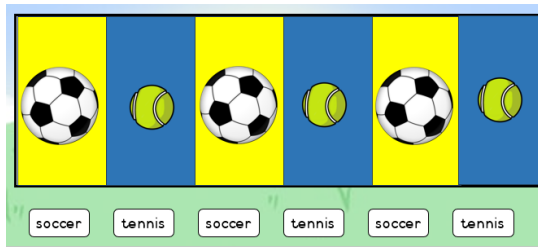
Patterns made using **toys**:



Patterns made using **fruit**:

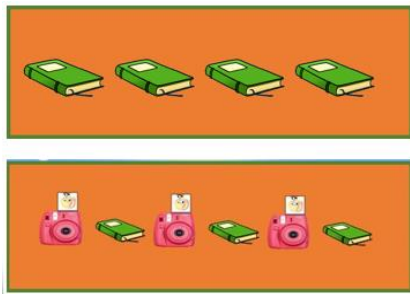


Patterns made using **balls**:

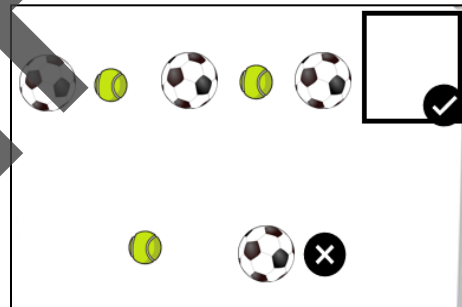
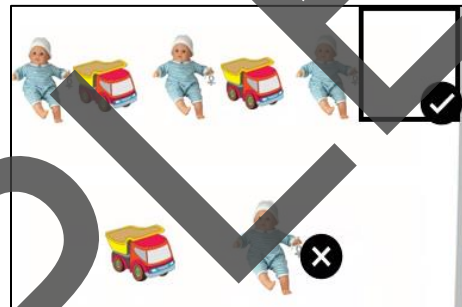
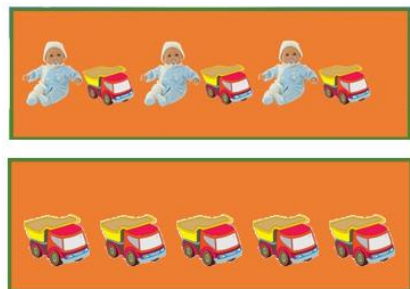
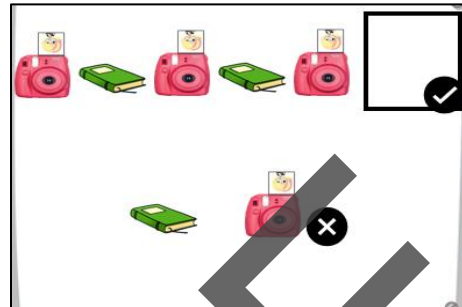


Pattern questions: (PowerPoint script)

Learners must select the correct pattern.



Learners must select the object that will be next.



Activity:

I. Circle the correct pattern.



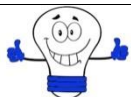


Algorithms & Coding



Flashcards

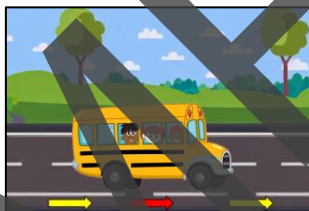
bus		school	
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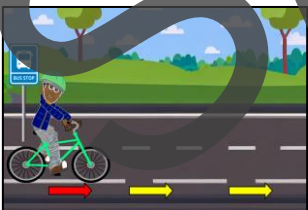
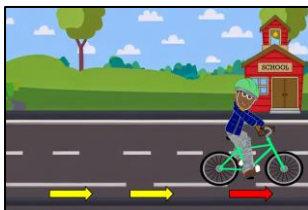
Sequence

A sequence is a series of actions performed in a specific order.
Recap week 1.

When we go to school, this also happens in a sequence.
The Future-FUN CAPS learners go to school by bus.

		
First, the children get on the bus.	Then they travel to school.	Then they arrive at school.

Some children go to school by bicycle.
Let's see how Caleb gets to school.

		
First, Caleb gets on his bicycle.	Then he travels to school.	Then he arrives at school.



Activity:

2. Look at the following pictures: Number the pictures in the correct order from 1-3

	2		3		1
	3		1		2



Robotics



Flashcards

on		off	
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Robots

A robot has an on switch.

A robot has an off switch.

Robot questions:

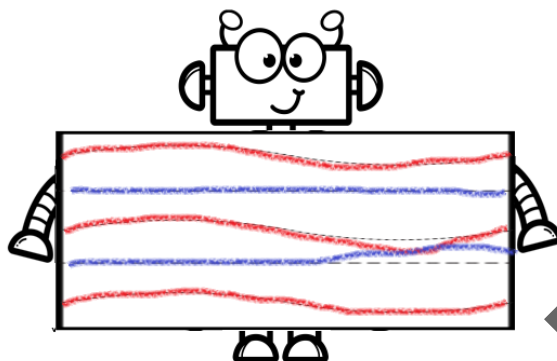
Learners click on the on button to make the robot dance.

Learners click on the off button to switch the robot off.



Activity:

3. Trace the shapes



Digital Concepts (PowerPoint script)

Learners learn that you can switch a computer on and off. They can switch any machine on and off. Humans are still in charge of technology.

Learners learn about technology. Technology is all around us. We use electronic devices daily. Ask the learners to name one electronic device we use every day.

They should identify the following devices: Cell phone, computer/laptop, radio and TV.