

Computing Grade _ 4

UNIT/STRAND

TOPIC

Sub Topics

Session

Prepared By

Computational Thinking & Programming

(Networks & Digital Communication – 1 week)

Precise Algorithms

Algorithms, Debugging Programs,
Animal Animations,
Repeat Commands
2025-26

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Digital device



Digital device

- Digital devices are pieces of hardware that use computers.
- They are found everywhere in the digital world.

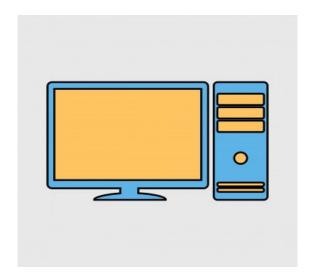




Digital device



Types of digital device











Router



What is a Router?

- A box that help devices to connect with the internet.
- Sometime devices cannot connect to the internet.
- Reason:
- too far from router
- no internet signals
- router not working

Activity



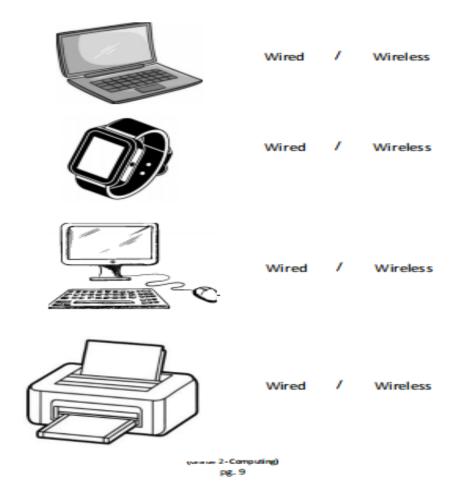
Open booklet page 9 and 10 and solve the given activity.

Activity page 9



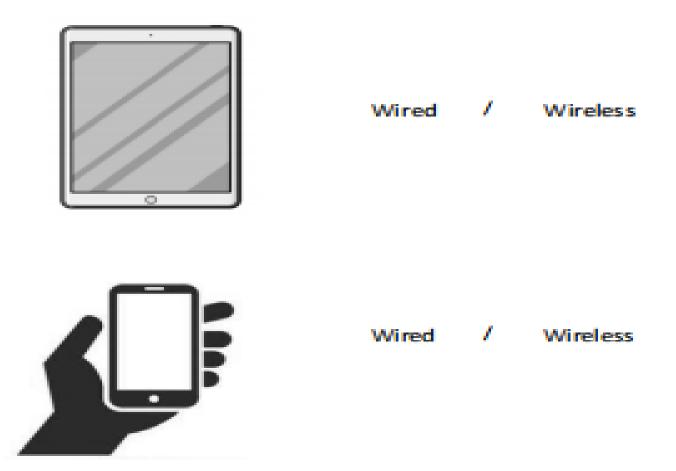
Task 1: Identify wired and wireless devices

Look at the following pictures and circle which type of connection each digital device uses, wired or wireless. Careful! Some can use both. In that case circle both words.



Activity page 10





Repeating Algorithm



Algorithm

- It is a set of instructions.
- It can be written instructions, spoken instructions or even diagram.
- Programmers use algorithms to make programs and solve the problems.
- As example recipe to make a juice.

- Put ingredients like sugar, milk, fruits in the juicer.
- Start mixing the ingredients.

Debugging in Algorithm



Debugging

Zara has written an algorithm for getting dressed. Can you find the bug in Zara's algorithm?



- 1. Put on your trouser.
- 2. Put on your T-shirt.
- 3. Put on your shoes.
- 4. Put on your socks.

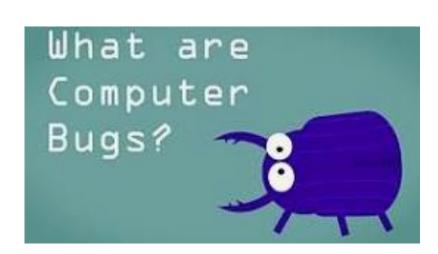


Debugging in Algorithm



Debugging

- When we take lots of care and even then, there may still be
 - mistakes in an Algorithm.
- These mistakes are called errors.
- Errors in algorithms are called bugs.
- Correction of error is called debugging.



class activity on booklet



Booklet - Page 12

How To	Brush Your Teeth
First	
Next	
Then	
Last	

Introducing Bee-bot



Bee-bot

- Small colorful programmable robot designed for children.
- The Bee-bot moves step by step according to the instructions.
- Buttons

- √ forward
- ✓ backward
- ✓ turn-left
- √ turn -right
- √ Go
- ✓ Clear