

Coding

Insight

1

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Introduction

Welcome to Coding Insight 1!

This book is designed to introduce the foundations of coding to primary school students in a simple and engaging way. Coding Insight 1 combines computational thinking with creative activities to build problem-solving, sequencing, and logical reasoning skills.

Each chapter is supported by stories, puzzles, and activities that link coding concepts to daily life. Teachers will find a balance of structured lessons and interactive tasks that nurture both collaboration and independent learning. Coding Insight 1 aims to make coding approachable, enjoyable, and relateable for young learners, while equipping them with essential skills for the future.

— The Publisher

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Key Features of the Series



Warm-Up

Introduces the lesson with a simple, engaging activity like picture spotting, short questions, or discussions to activate preknowledge and connect learning to daily life.

Remember and Recall

Review exercises to check understanding that reinforce key concepts.



Let Us Do It

Draw three shapes in Microsoft Paint, then colour them. You can also try other tools to make your picture. Do not worry if you make mistakes, you can always undo it and try again!



1. What tools did you use to draw the house?
2. What tools did you use to colour the house and objects?
3. If you made a mistake while drawing and colouring the shape, which tool can you use to correct it?

Let Us Do It

Hands-on practice where students apply knowledge through various engaging activities.



Think and Share

It encourages imagination, reflection, and discussion by asking students to share ideas or pretend to be experts, helping them build creativity and communication.

Brain Pops
A fun fact or short "Did you know?" moments that shares history, science, or surprising insights.



Assess Yourself

A self-assessment section with more structured and extended exercises where students test their mastery independently, often combining different types of questions.

Brainstorm
Open-ended deep learning, creative, and critical thinking tasks where students design, create, or reflect in ways that apply knowledge to real or imaginative contexts.



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Meet Our Friends!



Johan

is always curious and loves learning new things. He is cheerful and enjoys figuring things out with his friends. His positive attitude often helps the group stay on track.



Pascal

is adventurous and loves sports. He is always ready for a game or an outdoor adventure. Brave and energetic, he encourages his friends to explore and have fun.



Robin

is creative and loves making things. She always has fun ideas for crafts or activities and thinks outside the box. Her playful and imaginative spirit makes her a joy to be around.



Indy

is kind and polite, always helping others. She is calm and thoughtful, but also a little clumsy, which leads to funny moments with her friends. Her caring nature brings the group together.



Mika

is quiet and shy, but she is very careful and thoughtful. She thinks things through before speaking or acting, and she is always there to offer advice when her friends need it.



Edison

is the smart one, always reading and sharing interesting facts. He loves solving problems and helping his friends understand things. Though serious at times, he has a playful side too.

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New topic alert!
How do you feel?



Excited



Nervous

Chapter

1

Smart Machines and Clever Keys

Welcome to the techworld!

Say hi to the computer, your clever helper, and the keyboard, the tool that works with the computer!

In this chapter, you will explore what computers do and how each key helps you type, fix, and create.

Let the typing adventure begin!



Coding Lingo

- Computer
- Keyboard

Warm-Up

Let us look at the picture!

Can you spot different machines in the room?

Write them in the box below.

Blank area for writing answers, containing two horizontal lines.





What is a Machine?

A machine is a clever invention that helps us do work more easily and quickly.

It can be something simple, like a nail cutter that helps us cut our nails, or something more complex, like a computer that can do many different things.

Each machine is designed for a special purpose.

For example, an air purifier gives us clean air, while an aeroplane helps us travel to far away places.

Nail cutter



Air purifier



Smartphone



Aeroplane



Computer



A computer is a very special machine.
Let us learn why!

Why is a Computer Special?

A computer can:

- Help you draw and colour
- Let you watch cartoons and play games
- Store your pictures and videos
- Help adults with their office work
- Help teachers show lessons in class

Amazing, right?



Think and Share!



Imagine you could turn any object in the room into a computer.

What would you choose and what awesome new things would it be able to do?



About the Computer

A **computer** is a smart machine that helps us in many ways.

Just like we need food, a computer needs **electricity** to function.

Similarly, our body has parts that help us act, and a computer has **parts** too.

Let us explore one by one.





Monitor

This is the part of the computer that looks like a television.

It shows pictures, videos, letters, and games.

Whatever we do on the computer, we can see it on the monitor.

System Unit

Just like electricity, the system unit is a very, very important part of the computer.

Inside, it has the brain of the computer called the CPU.

Without it, the computer cannot work.

It gives instructions to all the other parts and tells them what to do.

What is inside?

Inside the system unit, there are many small parts that help the computer work properly.

Think and Share!



The system unit is the brain of the computer and the monitor is its face!

Pretend you are a computer expert and show us where the computer's 'brain' and 'face' are.

What are they doing right now?



Mouse

A mouse? No, not the one that squeaks!

This mouse is different.

It helps you click and scroll on the computer.

It is a part of the computer that helps us move things on the screen.

Keyboard

A keyboard has many buttons.

These buttons are called keys.

They help us type letters and numbers.



Kinds of Computer Devices

Every computer has four main parts.

Let us group them!



Processing Devices

Processing devices are the parts that help the computer think and work.

The system unit is the most important processing device.

It is like the computer's brain.

It takes information you put in, thinks about it, and sends the answer back out.



The unit system is the main powerhouse that makes the magic happen, from showing your pictures, to playing your favourite games!





Input means information "going in".



Input Devices

An input device is like a computer's senses.

It is a part you use to give the computer information and tell it what to do.

Examples:

- Mouse
- Keyboard
- Scanner (it copies pictures or papers into the computer)

