Through a sequence of experiments, students explore digital systems and programming.

B4 Digital Technologies Learning System

SOME OF THE CONTENT

Primary

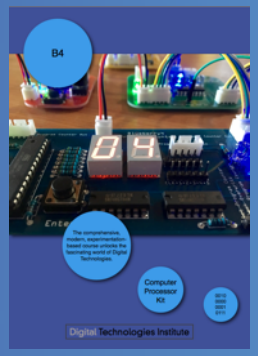
Primary Schools Starter Kit Binary Numbers • Variables • Adding • Pixel Graphics

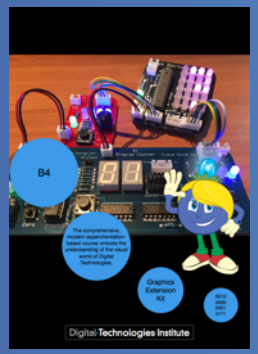
Secondary

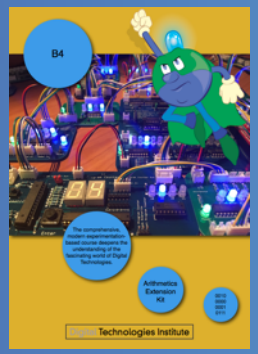
Computer Processor Kit Binary Numbers • Variables • Memory • Digital Systems • Sequences • Building a 4-bit Computer

Graphics Extension Kit Pixel • Animation

Arithmetics Extension Kit Loops • Data Pointers • Fibonacci Numbers







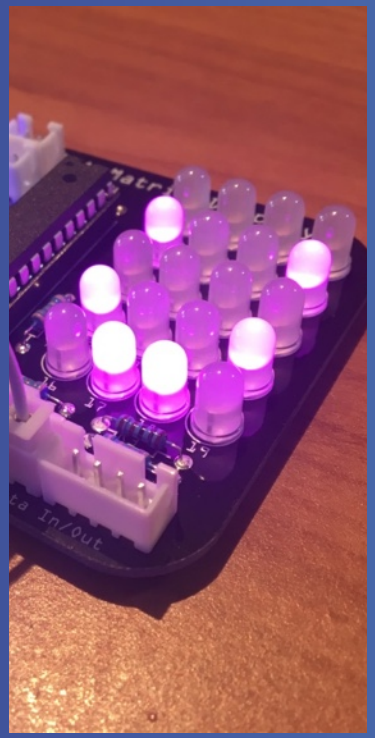
How does a computer work?
How does it add?
What is computer graphics?

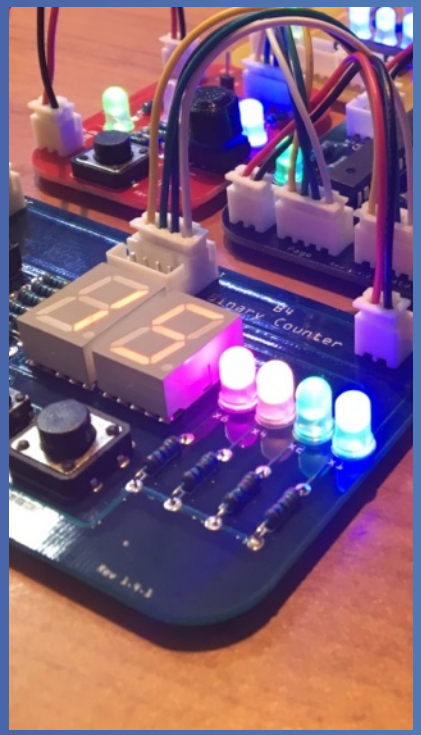
SUITABLE FOR PRIMARY AND SECONDARY

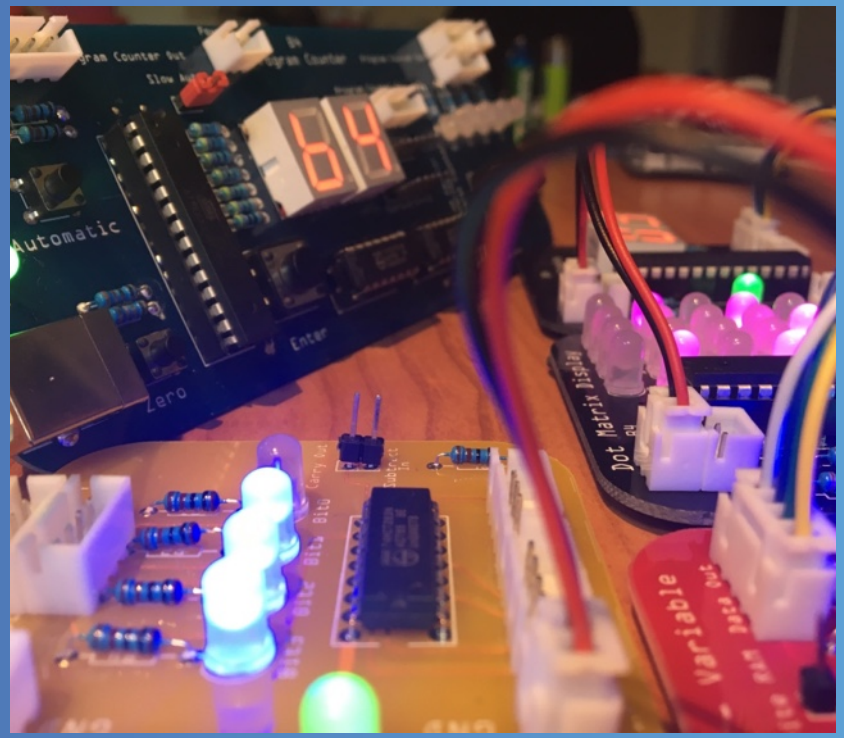
Digital Technologies Institute

Find more info on the web:
digital-technologies.institute

Open, interactive, programmable and beautifully m • o • d • u • l • a • r







B4

The B4 has been designed to help students explore the fundamental operation of computers under the new Australian Curriculum: Digital Technologies. It supports the teaching of the knowledge and understanding of digital systems, the representation of data and algorithms.

The B4 consists of modules that represent core functions of a computer, such as binary counting, adding, memory, graphics, etc. With these, students undertake experiments which lead to increasingly sophisticated hardware and software arrangements. The B4 operates at human speed and allows students to explore what is generally hidden inside the black box of their smartphone, tablets or laptops. Each B4 kit comes with a handbook and online videos containing a sequence of exciting experiments for students and teachers.

The Digital Technologies Institute has carefully transformed core computing concepts into a syllabus and lesson plans suitable for primary and secondary students.

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