Activity 5

Explain data signalling.

Use the words to fill in the blank spaces.

analogue	binary	signals
numbers	digital	pulse

Electronic devices such as microcontrollers communicate with other devices and component using electronic ..... . There are two methods of sending and receiving electronic data signals, these are ..... signals and digital signals.

Microcontrollers are digital devices which means they can communicate easily with other devices and components that use digital signals. A digital signal is an electrical signal that sends and receives information using ..... digits.

Analogue signals contain more information than digital signals. They can use many ..... to represent their values. Analogue devices and components cannot communicate as easily with digital devices.

To input data from an analogue device or component, microcontrollers use analogue to ..... converters (ADC). These devices convert analogue signals to digital values that they can use.

To output data to an analogue device or component a microcontroller can use a digital to analogue converter (DAC). In some cases, microcontrollers do not have DAC converters. However, some microcontrollers use ..... width modulators (PWM) to generate analogue signals.

LIVEWORKSHEETS