1 Number Systems

Activity 1.1

Fill in the blanks with the words given in the word list.

> Word list
> binary, 2, base, 10, decimal

a). A number system using 10 symbols is a .... number system.

b). The base for 1001_{10} is ....

c). A number system using .... symbols is a .... number system.

d). The number of symbols in a number system is its ....

Activity 1.2

Expand the decimal numbers given below;

a) 528_{10} b) 186_{10} c) 308_{10}

Activity 1.3

Convert the following decimal numbers to binary numbers.

a) 28_{10} b) 47_{10} c) 101_{10} d) 128_{10}
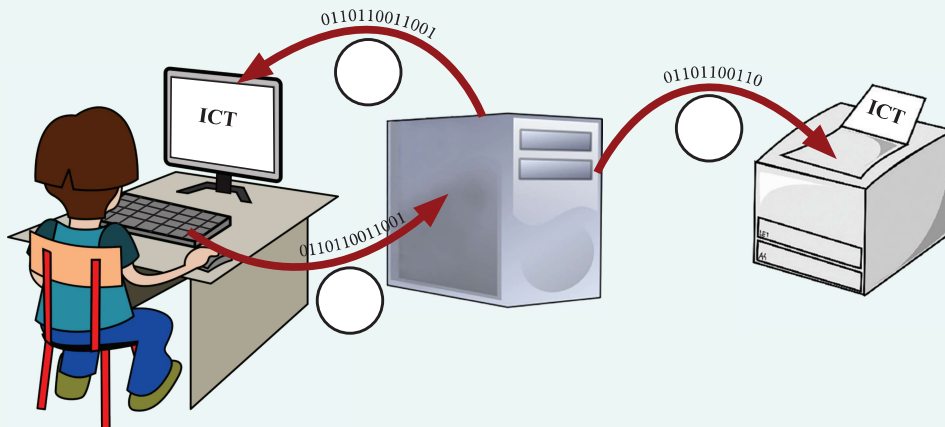
e) 173_{10}

Activity 1.4

Convert the following binary numbers to decimal numbers.

a) 10010_2 b) 11011_2 c) 1011011_2 d) 111111_2

e) 10000000_2

Activity 1.5

Use the information in the illustration below to answer the questions that follow.

A student types the word ICT on the keyboard. Given below are the steps showing the order of data exchange, when typing the word ICT. Write the number of each step according to the order of data exchange in the circles near the arrows.

Step	Activity
1	As the word ICT is typed, the data flows in binary pattern to the system unit.
2	The binary data saved in the computer memory flows to the printer and prints the word ICT.
3	The binary data saved in the computer memory flows to the monitor and shows the word ICT on the screen.