

1) Fill in the blanks.

| | | | | |
|-----------|-----------------|-----------|----------|------|
| my blocks | Network failure | Micro:bit | Keyboard | Text |
|-----------|-----------------|-----------|----------|------|

1. **Micro:bit** is a physical computing device.
2. **Keyboard** is an input device.
3. Sub-routine blocks can be created from **my blocks** in the palette.
4. **Network failure** is when a fault with hardware or software stops a network working properly.
5. **Text** files are made up of letters, numbers, symbols, and blank spaces.

2) State whether the statements are true or false.

1. Encrypted data is known as ciphertext.
2. Application software are programs that carry out a specific task.
3. Indefinite (forever) loops where instructions repeat a number of times before stopping.
4. Many devices are operated using a control system.
5. Scratch is an example of a system software.
6. Light sensors are not found in streetlights.
7. Criminals often steal personal information for financial gain.
8. The Caesar cipher is also known as a substitution cipher.

3) Match the following.

| | |
|-----------------------|---|
| 1. Android | a) Input device |
| 2. keyboard | b) System software |
| 3. Caesar cipher | c) Exchange letters for symbols |
| 4. High quality video | d) Replaces each letter with a new letter |
| 5. Pigpen cipher | e) Physical computing device |
| 6. Micro:bit | f) More storage |

| | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1. | 2. | 3. | 4. | 5 | 6. |
| b) | a) | d) | f) | c) | e) |

4) Answer the following.

1. Ms. Sama is an engineer, designing a new washing machine with advanced features. She needs to explain the input, process, and output stages of the system to her team. Can you help her identify these stages?

Input: User selects wash cycle, temperature settings, add detergent.

Process: Water filling, rinsing, spinning.

Output: Dirty water drained out, beep sound and clean clothes.

2. Write one difference between application software and system software.

Application software are programs that carry out a specific task whereas system software are programs that control how the computer systems functions.

