

3 Memory and storage – Part 2

Name: _____ Class: _____ Date: _____

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)
RAM	随机存取存储器	_____
volatile	易失性	_____
ROM	只读存储器	_____
non-volatile	非易失性	_____
Secondary storage	辅助存储	_____

Recall

A computer needs memory to hold data and programs. There are two main kinds.

New ideas

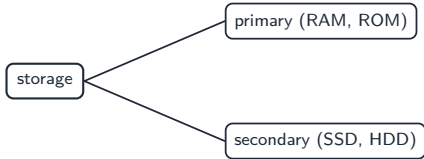
Read these first, then do the Practice.

■ 1 RAM and ROM

RAM	ROM
volatile	non-volatile
can change	cannot change
running programs	startup (BIOS)

- **RAM** 随机存取存储器 is **volatile** 易失性 — it loses its contents when the power is off;
- **ROM** 只读存储器 is **non-volatile** 非易失性 — it keeps its contents.

■ 2 Primary and secondary storage



Secondary storage 辅助存储 (like an SSD) keeps files permanently, even when the power is off.

Watch out: **RAM** is *volatile* (loses everything when the power goes off) and holds running programs; **ROM** is *non-volatile* and holds the startup instructions. **Secondary storage** (SSD/HDD) keeps your files permanently.

Practice

Try these in order.

3.6 Which memory loses its contents when the power is off — RAM or ROM? [1]

3.7 What does *volatile* mean? [1]

3.8 What is stored in ROM? [1]

3.9 Give one example of secondary storage. [1]

3.10 Why do we need secondary storage? [1]

3.11 Challenge. When you switch a computer off, the program you were running disappears but your saved file does not. Explain why, using RAM and secondary storage.^[2]