

## **In the last lesson you were asked to:**

1. Read the handout about Information Processing Systems.  
Answer questions 1 - 3 only.

You had to ignore questions 4 & 5.

## **Storage of data: Chapter 9**

### 2. Definitions:

- Database - Organised collection of information.
- File - stores a range of information.
- Record - contains info about one person or thing. It can be numeric, character, date, logical (y/n)
- Field - E.g a persons name or address in a record.
- Key Field - May be used to search a file. It is best that this is unique to a particular record. E.g An admissions number for each member in a sports centre.

## **FILE ORGANISATION**

- Serial files - No particular order allows for the insertion of another record.
- Sequential files - Like serial files but can be held in a certain sequence. E.g members in number order in a Sports Centre database.
- Random files - As the name suggests, they are not stored in any particular order. They are held/stored on disc.

- **QUESTION:**

- **What are the advantages and disadvantages of a database?**

- **How do we access files?**

- 1. Serial access - reads each file until the desired one is found.
- 2. Sequential access - Records are in order - can be slower to find.
- 3. Direct access - accesses files directly.

- **Types of files:**

- Master Files - Most up to date and important file.
  - Transaction file - Can hold temporary data and be used to update the master file.
  - Back-up or security file - copies of originals.
  - Grandfather/father/son principle - 3 generations of file are kept. The oldest being the Grandfather, the youngest being the son!
- **FIND OUT WHAT THE FOLLOWING MEANS:**
  - 1. Fixed and variable field lengths
  - 2. Updating, insertions, deletions and amendments.
  - 3. Sorting, merging, file interrogation and data analysis.