The fetch-decode-execute cycle

There are **three** steps to processing instructions given by a currently running program:

1. The fetch cycle takes the address required from memory, stores it in the instruction register, and moves the program counter on one so that it points at the next instruction.
2. The control unit checks the instruction in the instruction register. The instruction is decoded to determine the action that needs to be carried out.
3. The actual actions that happen during the execution cycle depend on the instruction itself.