Laptop Hardware and Components

At the end of this episode, I will be able to:

1. Identify laptop hardware.

Exam Objective: 1.1 - Given a scenario, install and configure laptop hardware and components.

Description: In this episode, the viewer will be shown a variety of the hardware and components such as hard disk and solid-state drives, SODIMMs, batteries, keyboards, webcams, microphones, wireless cards and antennas and more.

- Laptop Components
 - Battery
 - Nickel Cadmium (Ni-Cd)
 - Nickel Metal Hydride (Ni-MH)
 - Lithium Ion (Li-ion)
 - Keyboard/keys
 - QWERTY Keyboards
 - Non-standard key placement
 - Embedded

- Debris can cause sticking keys
- Numerical keypad and FN keys
- Motherboard
 - Low profile
 - Proprietary/non standardized
 - Embedded components
- Random-access memory (RAM)
 - Same standards as desktop memory
 - Smaller form-factor
 - Parallel placement with locking tab
- 2.5 inch HDD/SSD (replacement and migration)
 - Same technology as desktops
 - Smaller form factor (2.5)
 - Lower rotational speed (HDD-only)
 - Quieter
 - Replacement/upgrade might require a migration
- Wireless cards and antenna
 - Antenna
- Webcam and microphone
- AC adapters
 - Convert AC to DC
 - Must match the laptop specs
- Backlight Inverter
 - Powers the laptop display
- Biometrics and cable locks
 - Security

Additional Reference Materials

Battery Technologies: http://www.iitk.ac.in/LDP/HOWTO/Battery-Powered/battery.html