**DV500\_2\_SAS On Laptop Hardware**

**Self-Assessment Sheet**

* **What does it mean to be modular?**

In the context of laptop batteries : easy to assemble / reassemble, upgrade or replace, configure. It is relative to construction design of a system (objects or applications). If something is modular, it is one part of an entire functioning system consisting of modules.

* **What type of battery technology do we use today?**

Lithium ion and Lithium ion polymer (LiPo).

* **What happens each time you charge a battery?**

The capacity diminishes by minimal amounts overtime.

* **What is one advantage to using a modular battery configuration?**

It is easy to replace if the battery capacity diminishes without taking apart the entire system.

It is also easy to carry multiple batteries so you don’t have to connect the laptop and recharge one. You can simply replace the uncharged battery with a fully charged one.

* **True or False? lithium-ion batteries are designed to be 80 percent charged.**

False

* **True or False? In lithium-ion batteries, discharging some of the battery and charging it back up again you have to worry about causing a effect on memory or limiting the amount of capacity that battery might have.**

False

Only the capacity of the battery diminishes in small amounts every time.

* **Where are all the programs that are executing in your operating system executing?**

Memory / RAM

* **What does SO-DIMM stand for?**

Small outline dual in-line memory module.

* **Where is SO-DIMM usually used?**

Laptops / mobile devices.

* **Are you able to change/upgrade memory for a device that has it soldered to the motherboard?**

No, not without replacing the motherboard or soldering memory which can be risky and/or expensive. This makes the memory non modular and non-upgradeable.

* **In what form do older laptops have storage in?**

Magnetic disk (moving parts)

2.5 inch form factor.

* **In what form do new laptops have storage?**

SSD (solid state drive)

M.2 form factor

* **What is one advantage of SSD?**

Silence, speed, longer lifespan (no moving parts/memory)

* **What is one way you can migrate from a hard drive to an SSD**

Clone original HDD to SSD with imaging software using drive-to-drive. All data is kept.

* **What are some types of authentications?**

Inputting a password to access the operating system.

Using the biometrics option to read fingerprints which has a separate piece of hardware.

* **What is one disadvantage of laptop keyboard?**

The key cap and/or components under can break easily.

* **What is NFC?**

Near field communication on laptops / mobile devices. Contactless data communication.

* **What does NFC allow you to do?**

Quickly transfer data, authenticate, or access operating system. No need to physically touch, input information, etc. An example is contactless payment from phones at a grocery store.

* **Is m.2 a modular setup?**

Yes

* **M.2 interface on an SSD drive is larger than traditional SATA-connected SSD? True or False?**

False