



Start Time	Start Time	Activity	End Time	End Time
8:00	11:05	Agenda	8:45	11:45
8:45	11:45	Start labs	9:05	12:05
9:05	12:05	Lecture	10:10	1:10
10:15	1:10	Clean up	10:20	1:15
1:20	1:15	Homework tonight: Hard drive guts video and quiz	10:20	1:35
Class excused				



Learning Targets This Unit

- When I get to the end of this lesson, I can do these things:
- Understand the physical components of a hard drive
- Understand the physical components of a thumb drive

Learning Targets This Unit

- Understand how a hard drive reads and writes to a disk
- Configure Virtual Box
- Understand what a Virtual Hard Drive is
- Understand what a Virtual Machine is

Learning Targets This Unit

- Understand how to install a virtual OS
- Understand how to partition unallocated space on a hard drive
- Understand how to format a partition

Learning Targets This Unit

- Understand how to locate and recover files from damaged removable media.
- Understand the purpose of Bitlocker
- Understand why you would want to encrypt a portable drive.
- Understand how to create a portable Office drive using a USB drive.

Learning Targets This Unit

- Understand how to create a recovery disk in Windows 8.1
- Understand the purpose of recovery disks.
- Identify other OSes for which you can create recovery disks.
- Understand how to use virtual floppies
- Understand how to use and install DOS
- Understand how to use a command line OS
- Understand how to use a command line utility

Learning Targets This Unit

- Understand how to perform a format using FDISK
- Understand FDISK
- Understand how to install a hard drive into a computer
- Understand how to set up a new hard drive

Learning Targets This Unit

- Understand the difference in file systems
- Understand how to change file systems
- Understand the built in hard disk tools in the OS
- Understand how to use the command line to perform common tasks

Reading

- **Hard drive design and operation**

Question One

- What is an air bearing?

Question Two

- What is flying height?

Question Three

- How high is flying height?

Question Four

- How thick is the ferromagnetic coating on a platter? Is that thick?

Question Five

- How thick is a strand of DNA?

Question Six

- If you were using DNA strands to measure how thick the ferromagnetic coating is, how many DNA strands thick is it?

Question Seven

- What is the purpose of a clean room?

Question Eight

- Why is a fingerprint on a platter disastrous?

Question Nine

- Can you freeze a hard drive to recover data that has been deleted? Why or why not?

Question Ten

- How does the magnetization of bits change on the platter when data needs to change?

This week at Sno Isle

- Monday, Oct. 26
 - ASB Executive Meeting in the Study Center, 8:30AM & 11:30AM
- Wednesday, Oct. 28
 - Fashion field trip to Macy's 8:30AM-1:15PM
 - ASB General Meeting in the Study Center, 8:30AM & 11:30AM
 - NO SCHOOL: Darrington, Lakewood
- Thursday, Oct. 29 The Study Center is closed 8-11:30AM
- Friday, Oct. 30
 - NO SCHOOL: Darrington, Eastside Summit
 - Normal dismissal time for Cascade and Jackson: 10:25AM
 - LAN Party in Lecture Halls A & B, 3:30-11:59PM

Halloween Costumes



- Students, please remember that Sno-Isle TECH is a professional environment. If you wear a costume, it must be safe, school appropriate, and not conceal your identity (no face paint, masks, weird contacts, etc). No weapons or weapon look-alikes are allowed. If in doubt, ask Maggie.
- Thank you!