Blown to Bits	Chapters 1 & 2	Name: _____

Questions

Describe, in your own words, Moore's Law.

What was the Internet called when it was first invented, and what year was that?

Give an example of how the digital explosion is "neither good nor bad" but has both positive and negative implications.

After reading chapter 2, do you think you will change your online habits, or continue to give up some of your privacy for convenience?

What do you think metadata is?

You read about RFID, what is this?

What does it mean to deidentify information?

What is the Internet of Things (IoT)?

List some of the key terms from the IoT section, and what they mean:

Reflection/Notes/Questions – Use this space to take notes or list questions you may have

What is one concept you would like explained more, or a specific question you have on something discussed in what you read?

Blown to Bits		

The Koans of Bits (Ch 1)

Koan		Summary	Example from Book	Your Own Example
1				
2				
3				
4				
5				
6				
7				

CS50 AP: Understanding Technology	Hardware	Computers and Computing

Key Terms

Computer:

Computing:

Input:

Output:

Algorithm:

Programming:

Computational Process:

Hardware:

Software:

Operating System:

CPU:

Key Ideas

What characteristics define a computer?

Do computers necessarily need electricity to be considered computers? Why/why not?

Reflection/Notes/Questions

Is it still considered computing if you get the wrong answer? What are the essential components of computing and computation?

Thoughts/notes:

CS50 AP: Understanding Technology	Hardware	How Computers Work / Memory

Key Terms

Bit:

RAM:

HDD:

SSD:

Peripherals:

Heatsink:

Key Ideas

How is it that your computer knows to display words on your screen instead of playing music?

What are some of the common ports on computers and what do they do?

What is the key thing that the operating system (OS) does for you?

Reflection/Notes/Questions

Are there different layers of hardware? What makes up these layers, and how do they interact?

Thoughts/notes:

CS50 AP: Understanding Technology	Hardware	Memory

Key Terms

Memory:

Cache:

Volatile:

Non-volatile:

Key Ideas

What is the largest type of memory?
Smallest?

How much memory does a 32-bit CPU have?
64-bit?

Reflection/Notes/Questions

What are some of the tradeoffs when considering types of memory?

Through all of this unit, you have probably heard a lot about abstraction; what exactly is abstraction?

Thoughts/notes:

CS50 AP: Understanding Technology	Hardware	Transistors and Logic / CPU and SoC

Key Terms

True:

False:

Boolean Logic:

Core:

Motherboard:

SoC:

Key Ideas

In Boolean logic, how are the values represented?

What are the relative voltages that go along with those values?

Reflection/Notes/Questions

Thoughts/notes: