Group Members:

Date:

Blown to Bits Chapter Questions

**Chapter 1**

1. What is a bit and what does it mean to say that "it's all just bits"? Give examples of the different kinds of things that today are represented by binary data?
2. 2. Describe Moore's Law.
3. Someone offers you a summer job and offers you two payment schemes: (1) $10 per hour for 40 hours per week for 30 days or (2) One cent on day 1, two cents and day two, four cents on day three and on (doubling each day) for 30 days. Which pay would you choose? What does this story illustrate?
4. 4. Give an example of how the digital explosion is "neither good nor bad" but has both positive and negative implications.

**Chapter 2**

1. What's an RFID tag and what does it do?
2. What's an EDR and what does it do?
3. Is it possible to identify, say, a patient, knowing just his or her gender, birth date, and zip code? Explain.
4. What's the difference between "big brotherism" and "little brotherism"?

**Chapter 3**

1. What is metadata? Give an example.
2. What is a model, as this term is used in how images and sound recordings are digitized?
3. What's the difference between a raster image and an ASCII representation of a text document?
4. What is steganography and what is it used for?
5. What would you have to do to delete a document from your computer so that it could not possibly be read by anyone else?

**Chapter 4**

1. p. 117: "The architecture of human knowledge has changed as a result of search." What does this claim mean? Do you agree?
2. When you type a word or phrase into the Google search engine, does it search the web? Explain.
3. Think of a number between 1 and 100. If you tell me "too high" or "too low" I can guess the number in 7 guesses. How come?
4. p. 144: "Google emerged -- from this dilemma at least -- with its pocketbooks overflowing and its principles intact." Do you agree?
5. What do you think about the differences between Figure 4.10 and Figure 4.11?

**Chapter 5**

1. What is security through obscurity and why is it bad?
2. What is the key agreement protocol and why is it so important to Internet commerce?
3. What is a certificate and what role does it play in Internet security?

**Chapter 6**

1. Why should all Internet users be aware of copyrighted material?
2. What is a GB? How many bytes are in GB?
3. What is the NET Act and what is its significance in the history of copyright?
4. What is a peer-to-peer architecture? Provide an example of at least one well-known peer-to-peer network.
5. What is the DMCA and why is it significant to copyright?
6. What are Open Access and Creative Commons? How have they impacted the sharing of digital information?