1. List the career opportunities in this field.
2. Producer
3. Engineer
4. Assistant Engineer
5. Mastering Engineer
6. Disc Jockey (DJ)
7. Artist Management
8. Studio Management
9. Live sound tour management
10. Artist and Repertoire (A & R)
11. Club Management

2. The distance a sound, as seen on a computer display, varies from the “centerline” is called it’s **amplitude**.   
3. When we look at an audio sound bite in a digital audio workstation, the horizontal left-to-right image is called its **wavelength.**  
4. The speed at which a wave travels through a medium is called its **velocity.**

5. The three basic waveforms used to create synthesizer sounds are named **square, triangle, and sawtooth.**

6. To create a sound from scratch, four paragraphs are needed to construct a new sound. A Musical Waveform Envelope is made up of four parts:

1. Attack
2. Decay
3. Sustain
4. Release

7. The scale for measuring the volume of a sound is called the **decibel scale.**

8. The volume of a whisper is approximately **30 dB.** The volume of a airplane taking off is approximately **120 dB.**

9. A popular graph for measuring our ear’s sensitivity to loudness is known as the **Fletcher- Munson Curve.**

10. The recommended volume for mixing is **85 – 95 dB.**   
11. Why is it so important not to mix too loudly or too softly?  **The sound will be heard differently is mixed too loudly or softly.**

**Lesson 1 – Safety in Hearing**

**200 Decibels – Immediate Danger to Hearing**

**-**Firing heavy weapons at a 5 m distance

**125 Decibels – Pain Threshold**

**-**Loud hand clapping at a 1 m distance

-Hammer stroke at a 15 m distance

**120 Decibels – Risk of hearing damage in 75 minutes.**

**-**Whistle at a 1 m distance

**-**Test run of a jet at a 15 m distance

**115 Decibels – Risk of hearing damage in 15 minutes.**

**-**Take – off sound of a plane at a 10 m distance

**110 Decibels – Risk of hearing damage in 30 minutes.**

**-**Siren at a 10 m distance

**-**Speakers at a rock concert 10 m away

**105 Decibels – Risk of hearing damage in 1 hour.**

**-**Banging a car door

**-**Racing car at a 30 m distance

**100 Decibels – Risk of hearing damage in 2 hours.**

**-**Jack Hammer at a 10 m distance

**-**Frequent level of music via headphones

**95 Decibels – Risk of hearing damage in 4 hours.**

**-**Hand circular saw at a 1 m distance

**-**Loud Crying at a 1 m distance

**90 Decibels – Risk of hearing damage in 8 hours.**

**-**Angle grinder at a 1 m distance

**-**2 – stroke Chainsaw at a 5 m distance

**Session # 1 – Studio Notes**

During our first studio session, Mr. Orr and myself reviewed the first lesson assignment thoroughly going thru the answers to each question. Discussed what I am to expect in the next session, Mr. Orr then gave me his own assignment, to use my ears like never before and is expecting me to relay what I’ve experienced. Both Mr. Orr and myself are getting acquainted and everything is great so far! Looking forward to our next session.