Preparation for September

Watch each video, then revisit parts of it to answer the questions below. You may be asked to make notes, define terms, do some additional research, etc.

# [Frequencies & Sound Explained #1 (goo.gl/NgM9Qc)](https://www.youtube.com/watch?v=jveKIYyafaQ&index=1&list=PL86D5A3CA4C8BF2E8)

Define these important terms.

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| --- | --- |
| **Wave Cycle** |  |
| **Frequency** |  |
| **Range of human hearing** |  |

# [Filters Explained #1 (goo.gl/6MBMzj)](https://www.youtube.com/watch?v=rkwS6vigSyE&index=2&list=PL86D5A3CA4C8BF2E8)

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| What is the purpose of a **filter?** |
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| What is another name for a **High-Pass Filter**? |
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| What is the **cut-off frequency**? |
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| Which frequencies are removed by a **Low-Pass Filter**? |
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| What is meant by a filter having a **12dB slope**? |
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# [Frequency and Sound Explained #2 (goo.gl/pXjNHd)](https://www.youtube.com/watch?v=uJDDI9beju4&index=4&list=PL86D5A3CA4C8BF2E8)

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| How does the sound of **square**, **triangle** and **sine** waves compare? |
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# [Equalizers Explained #1 (goo.gl/ISsXfU)](https://www.youtube.com/watch?v=o6sqfYBIYVg&index=8&list=PL86D5A3CA4C8BF2E8)

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| Sketch a **Low Shelf** EQ curve below that **cuts** low frequencies |
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| Sketch a **Bell Curve** EQ curve below that **boosts** some mid frequencies |
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# [Equalizers Explained #3 (goo.gl/SXGmWd)](https://www.youtube.com/watch?v=dSyKbeWURg4&list=PL86D5A3CA4C8BF2E8&index=10)

Using the video, complete this rough graph of frequency bands and the (admittedly vague) sound quality that can characterise each zone. This is not very scientific, but will really help you if you have an idea of what to be listening out for and how to approach problems in your mix.

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| **Frequencies** | 20-60Hz |  |  |  |  |
| **Qualities** | Chest, rumble, hum, muddy |  |  |  |  |

# Presentation

Please prepare a short (5-minute) presentation on the basic usage, functionality and importance of one of the devices below. Be ready to present this to the class in September.

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| * Shure SM57 * AKG D112 * Minimoog * Humbucker pickup * Akai MPC60 | * Sequential Circuits Prophet-5 * Mellotron * Fairlight CMI * Korg MS20 * Roland TB-303 | * Yamaha DX7 * EMT 140 * Fender Twin Reverb amplifier * Max/MSP * Roland TR-909 |