

# Today – January 11<sup>th</sup>



**All** – Pick-up a Semest. Portfolio Score Guide

**Intro** – Coloring sheet, notes and/or myofibril drawing out (to reference), but otherwise clear your desk

**Advanced** – Pick-up returned worksheets and page of notes; warm-ups, laptops and headphones ready

**Reminders 'n Stuff**



- **2<sup>nd</sup> Qtr Stuff, Remediations & Semester Portfolio due TOMORROW! Exceptions? NO!!!**
- Laptops/tablets for tomorrow's reflection
- Come in after school Mondays, Tuesdays and Thursdays for help!



# Today – January 11<sup>th</sup>



## Introduction to Sports Medicine

- Remediations **due tomorrow by 11:59pm**
  - BREAKDOWN! Worksheet in Canvas
  - Integumentary & Skeletal Systems Exam via email
- **Activity:** Build-a-Myofibril

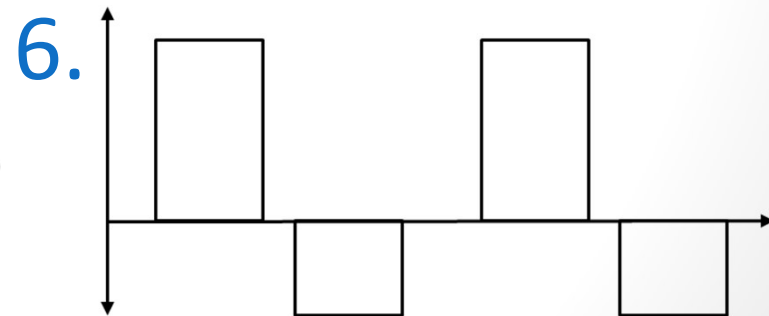
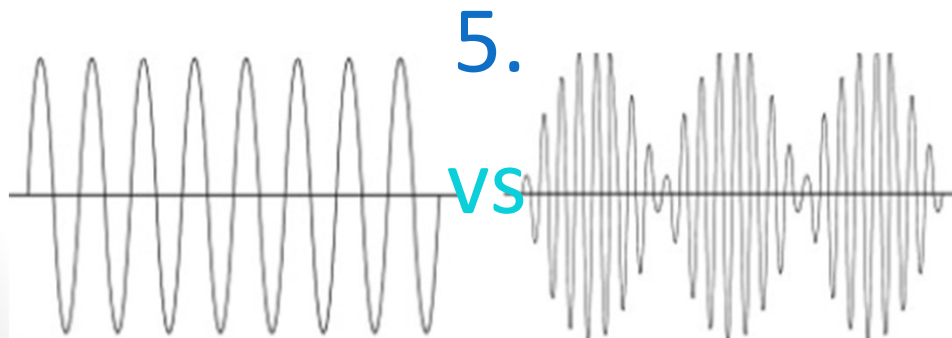
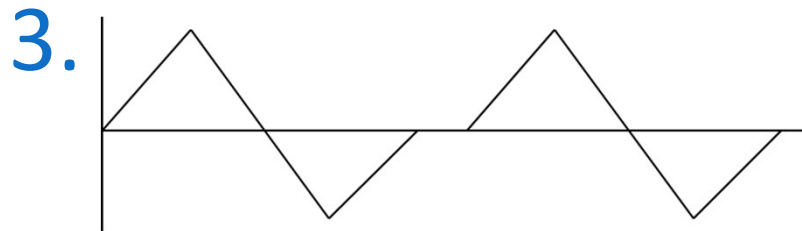
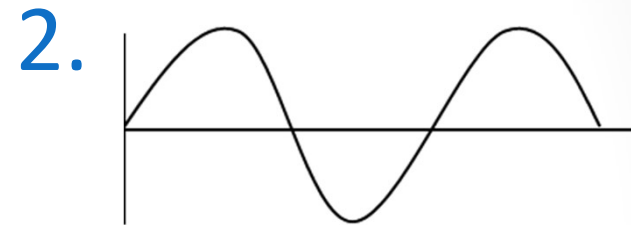
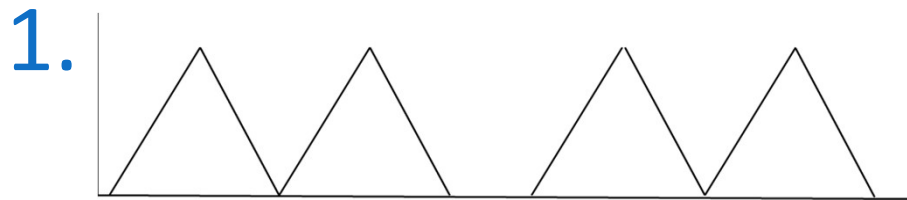
## Advanced Sports Medicine

- A word on ATR chores...
- **Warm-Up:** Waveform Review
- **Lecture:** Continue Electrical Modalities

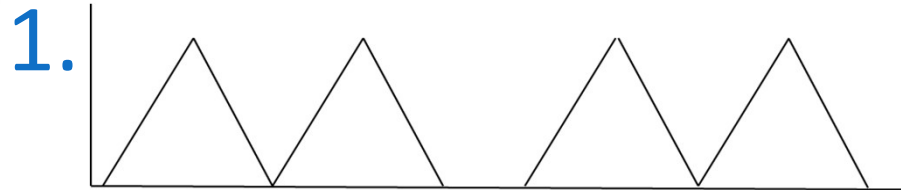


# Warm-Up (No notes, no blanks)

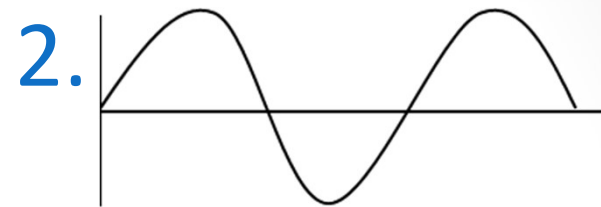
Identify the attributes of the following waveforms.



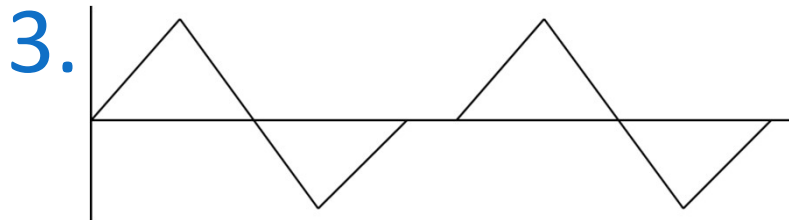
# Warm-Up Key



DC, monophasic, pulsed



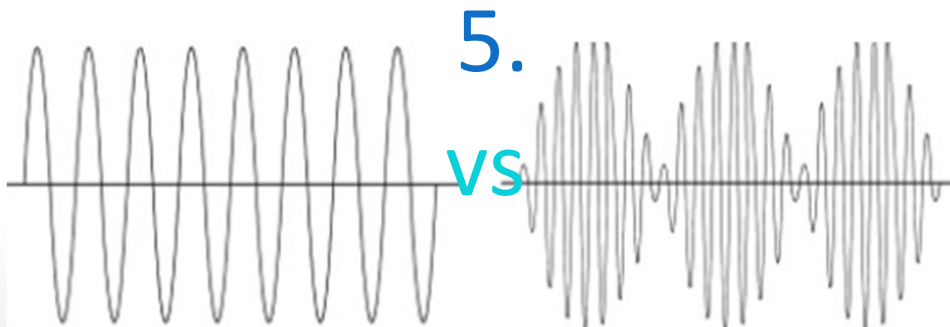
AC, biphasic, continuous, symmetrical, balanced



AC, biphasic, pulsed, symmetrical, balanced

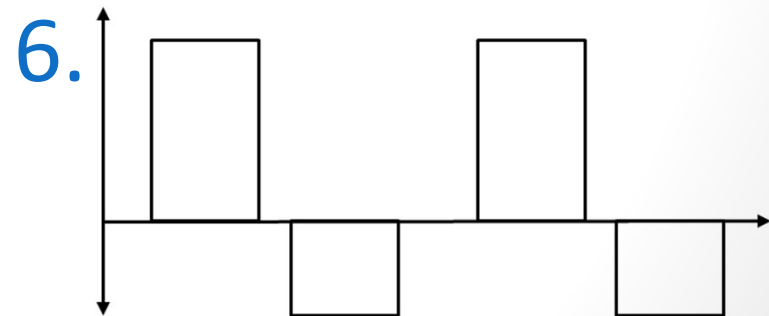


DC, monophasic, continuous



AC, biphasic, continuous, symmetrical, balanced, lower frequency

AC, biphasic, continuous, asymmetrical, unbalanced, higher frequency



AC, biphasic, pulsed, asymmetrical, unbalanced, lower frequency

# Build•A•Myofibril Workshop

## Procedure:

1. Choose your **group** (4-6 members)
2. The **structures** to be represented in your 3-D myofibril model, consisting of *at least* 2 sarcomeres, include:
  - Thick Filaments made up of myosin proteins (including myosin heads) & titin
  - Thin Filaments made up of F Actin (we won't include the other proteins at this time)
  - Cytoskeletal proteins:
    - Z-discs
    - M-lines

# Build•A•Myofibril Workshop

## Procedure:

### 3. **Materials** available include:

- Pipe Cleaners (of varying color; **thick filaments** should be **red**, thin filaments should be **green** IF you use pipe cleaners for these structures)
- Foam (in sheets)
- Beads
- Straws
- Yarn
- Construction Paper
- Permanent Markers
- Elmer's Glue
- Scissors

# Build•A•Myofibril Workshop

## Procedure:

4. Discuss/draw a **model design** *prior to* construction to avoid wasting materials. It's okay to experiment with ideas!
5. You have today and tomorrow to **construct** your model
6. The top three models as voted by YOU will be awarded *prizes!*

**Questions?**

