**Physical Education 8 APPLICATION – Physics of Exercise**

1. What type of physical activity uses levers? Explain in detail the parts of the lever. **Activity where you have to lift a wight heavier than you, such as a seesaw. You would be on the effort arm, which exerts the working force, and whatever you want to lift would be on the resistance arm. The center balance for both parts is called the fulcrum.**
2. What kind of physical activity uses force when exercising? Explain in detail

Whenever you are lifting a weight or using a machine. When you do these things, in order to move them, you must exert some sort of force over them.

1. What is Newton’s first law and how can you relate it to some form of exercising? **Objects will remain at rest or in a uniform motion, in a straight line, unless acted upon by an external unbalanced force. Moving a medicine ball or really any sport involving moving an object to and fro will be using Newtons first law of physics.**
2. What is Newton’s second law and how can you relate it to some form of exercising? **Acceleration of an object depends on the mass of the object and the amount of force applied. When you're cycling, how fast you move depends on how much you weigh and how much force your applying on the pedals as you move.**
3. What is Newton’s first third law and how can you relate it to some form of exercising? **For every action there is an opposite and equal reaction. When you play racket ball, for example, you are hitting a ball towards a wall. You hitting the ball is the action and the ball returning to you is the reaction.**

Watch this video

<https://www.youtube.com/watch?v=fvvHJGGctKA>

Now video yourself either bowling at a bowling alley – or you can take a ball and bowl it towards a target at your house. You must use the terms used in #1 - #5 and “coach” yourself for a better performance. For example – do you have too much force and the ball goes too fast or maybe you are rotating too much before you release the ball and it is curving too soon. Upload the video separately but evaluate yourself below. Don’t forget to use the terms from this lesson and the laws.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_I need to rotate myself more in order to release my grip at the appropriate time and have more spin. If I also exert more force, then my ball will go faster due to newtons second law. My ball isnt really curving at all , which I could correct by relaxing my thumb more and really relax my thumb and my grip. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Don’t forget to upload this to the dropbox labeled PE 8 Application Dropbox.