



Whoosh! Participant Expectations:

Complete Requirement #1—Watch and/or Read for three (3) hours material on Motion-related or motion-inspired technology. Come with five (5) questions related to that watching/reading and Be Prepared! to discuss two (2) of them. You will need to have a discussion with the Counselor in the breakout room, so make certain you take notes on your reading/watching.

Requirement #2—Discuss how Engineering is involved in the merit badge you are using for this award. If you have not earned one of these merit badges, that's ok. We will provide you with a Gold Card (similar to the merit badge Blue Card) that will track what you have completed. We will be available to meet to sign off the requirements if earned at a later date.

Archery	Aviation	Composite Materials
Drafting	Electronics	Engineering
Inventing	Mining in Society	Model Design & Building
Railroading	Rifle Shooting	Robotics
Shotgun Shooting		

Requirement #3—Connect the six (6) simple machines back to your Merit Badge for Requirement #2. You will need to know what the six (6) simple machines are:

- Wheel & Axle
- Pulley
- Inclined Plane
- Wedge
- Lever (bonus points if you know the class of lever)
- Screw

Requirement #4—Re-watch the amusement park videos from April 3rd and identify the simple machines present in at least two of the rides. Identify the forces involved in the motion of those rides. Examples include gravity and torque (force at an angle)

Requirement #5—Upload a video of your Minecraft Amusement Park Ride or a scan of your drawings (CAD or by hand). Be Prepared! to talk about the simple machines and forces present in your design (Minecraft has other forces besides Red Stone)

Requirement #6—Be ready to discuss how engineering impacts your everyday life. There are examples all around us, from the kitchen to the living room to the garage to the outside world. You might even want to think about how you could use the simple machines on a campout.