(10 pts) Draw or describe a reflex arc which results in the knee jerk reaction.

A knee jerk reaction is the response when a tap is placed on the patellar tendon that overlaps the knee. This pushes on the muscle that is connected to the tendon and the stretch receptors located in the intrafusal muscles start to separate (the coil) and therefore a greater number of AP's occur and this is sent along the afferent pathway to the CNS and brain. The brain and specifically the somatic part sends a signal down the somatic pathway of the afferent arm of the peripheral nervous system that tells the skeletal muscles to contract and the lower leg kicks out. There is now feedback by other sensory receptors that tell the reaction to subside by leg.