Traffic Light: Use the colors red, yellow and green to identify how you feel about the following topics. Highlight topics in GREEN if you feel comfortable with it, YELLOW if you have some doubts about it and RED if you have no idea and need to seek help. Use the Grade 10 Coordination and Drugs libguide to help you study:

Kognity Chapter 14 Coordination

Scientist Spotlight
- Paul Broca
- Santiago Ramon y Cajal
- Bernard Kart
- Ernest Starling
- Sir Charles R. Harington

Nervous System
- Central nervous system
- Peripheral nervous system
- Nerves
- Neurons: nucleus, axon terminal, dendrite, nerve ending
- Synaptic vesicle
- Neurotransmitters
- Synapses: vesicles
- Sensory neurons
- Relay neurons
- Motor neurons
- Reflex arcs
- Receptors in skin, brain, ear, eye, nose, tongue, and mouth

Hormones:
- Endocrine system
- Hypothalamus
- Pituitary gland
- Adrenal gland: fight vs. flight, heart rate increases, blood is sent from the digestive system, liver increases production of glucose
- Pancreas
- Ovary: estrogen
- Testes: testosterone
- Insulin for blood sugar level

Homeostasis
- Negative feedback: change to system reverses change
- Temperature (thermoregulation)
  o shivering, sweating
  o skin: vasodilation and vasoconstriction
- Blood Glucose Levels (insulin)
  o too high: glycogen
  o too low: glucagon
- Hormones

Eye
- Sclera
- Cornea
- Pupil
- Iris
- Lens
- Retina
- Optic nerve
- Pupil reflex arc
- Accommodation: Distance focus vs. close focus
- Inverted vision: upside down vision
- Rod and cones
- Blind spot

Plant Coordination
- External
  o Tropism: phototropism, gravitropism, geotropism, hydrotropism, thigmotropism
- Internal
  o Hormones: Auxin, Ethylene, Gibberellins, Cytokinin
What are drugs?
- Alters body’s chemistry
- Medicinal:
  - natural products:
  - Synthetic: antibiotics for bacterial infections; vaccines for viruses; antibiotics effect on bacteria; antibiotic’s relationship to evolution/natural selection
- Misused:
  - stimulants
  - depressants
  - sports-enhancing: stimulants, anabolic drugs (steroid hormones: testosterone), diuretics, painkillers, peptides

Liver
- enzymes
- scar tissue

Drugs Affecting Coordination
- Heroin: depressant
- Morphine
- Alcohol misuse: short term and long term effect on the body
- Smoking: carbon monoxide
- Nicotine
- Tar