

Unit 3.4 Control Systems Study Guide



Best Way to Study

- Go through slides in learn.vcs under Machine Control in Unit 3

Terms/Concepts:

- VEX Code
 - What is the “comment” purpose?
 - What are loop commands?
 - What does “when started” do?
 - What does “while” do?
 - What does “wait” do?
 - What does “wait until” do?
 - What does “forever” do?
 - Understand “if...then...else”
 - Understand nested “if...then...else”
 - Variable types
 - Know how “set” and “change” work with a variable
 - Know what “print” does
 - Know how to clear text on brain
 - Know how and when to use a function
- VEX Brain Motor and Sensors
 - Know the difference between a smart port and 3 wire port
 - Difference between VEX Motor and Servo?
 - Understand how a 3 wire port is digital and analog
 - Why is a bumper switch and limit switch a digital sensor?
 - Why is the potentiometer is an analog sensor?
 - Know the purpose of distance sensor and its approximate range (in inches). Know that it can determine size and approach speed.
 - Know purpose of optical sensor (brightness, proximity, and hue)
 - Know the purpose of the potentiometer
 - Know the uses of the brain
 - Know the difference between a smart port and 3 wire port
 - Know the parts and how to connect them (battery, battery cable, brain, sensors, connectors)
 - Know how to use the motors and sensors in VEX Code
- Flow Chart
 - Know the parts of the flow chart
 - Know how to read a flow chart