

ATTACHMENT B

CYBERCAMP INSTRUCTIONAL ACTIVITY SCHEDULE

School Division(s): Bristol Virginia Public Schools School: Virginia High School

Camp Begin Date: June 27, 2016 Camp End Date: July 14, 2016 Days of Week: Monday - Friday

Daily Instruction Begin Time: 8:00 am Daily Instruction End Time: 2:30 pm Specify alternate schedules below

Lunch Period (begin/end): 11:00 am Total instructional hours including guest speaker(s) field trip(s) and culminating

Enrollment 25 activity: 74 hours

WEEK 1 – JUNE 27 – JULY 1, 2016

Monday June 27	Tuesday June 28	Wednesday June 29	Thursday June 30	Friday July 1
<ul style="list-style-type: none"> ➤ STEM Electricity: <ul style="list-style-type: none"> ○ Intro to electricity <ul style="list-style-type: none"> ▪ Make a circuit ○ How batteries work <ul style="list-style-type: none"> ▪ Make a wet cell battery ➤ Intro to Humanities & Cyber <ul style="list-style-type: none"> ○ Learn about the connections between the physical person and the domain of cyber space ○ Learn about what it means to be a responsible cyber citizen ○ Discuss relevant improvements that cyber has made to life in general ➤ IC3 Pre-Test ➤ Robotics <ul style="list-style-type: none"> ○ Hello World 	<ul style="list-style-type: none"> ➤ STEM Electricity <ul style="list-style-type: none"> ○ Series & Parallel Circuits & Switches <ul style="list-style-type: none"> ▪ Make a variety of circuits ○ Design a Flashlight ➤ Current Events <ul style="list-style-type: none"> ○ Research cyber-security events and prepare a briefing on an event ➤ Guest Speakers (NESCC Advisor & Radford Advisor) ➤ IC3 Practice 	<ul style="list-style-type: none"> ➤ STEM Electricity <ul style="list-style-type: none"> ○ Humanities Content <ul style="list-style-type: none"> ▪ Cyber-attacks lead to a citywide blackout ➤ Cyber Society – Cyber Ethics <ul style="list-style-type: none"> ○ Digital Technology, Friendships & Personal Relationships <ul style="list-style-type: none"> ▪ Examine the impact of technology on friendships and relationships ➤ Robotics <ul style="list-style-type: none"> ○ ASCII and Timers <ul style="list-style-type: none"> ▪ Use the Boe-Bots to practice with variables and timing statement 	<ul style="list-style-type: none"> ➤ Robotics <ul style="list-style-type: none"> ○ Timers & LEDs <ul style="list-style-type: none"> ▪ Construct an OED Circuit on the Boe-Bot for a visual connection to processing speed ➤ Liberal Arts <ul style="list-style-type: none"> ○ Networks <ul style="list-style-type: none"> ▪ Discuss network terms and definitions ▪ Identify sample layouts of networks ▪ Students will construct a live “human” network in the classroom using ropes (network connections) and envelopes (data) and observe how information travels from device to device ➤ Guest Speaker - Bank 	<p>Field Trip to Northrup Grumman</p>

WEEK 2 – JULY 4 – 8, 2016

Monday July 4	Tuesday July 5	Wednesday July 6	Thursday July 7	Friday July 8
<p>JULY 4th HOLIDAY</p>	<ul style="list-style-type: none"> ➤ Cyber Society – Cyber Ethics <ul style="list-style-type: none"> ○ Digital Technology and the Human Personality <ul style="list-style-type: none"> ➤ Discuss the intellectual and emotional traits that can be cultivated through the use of technology and consider how to revise their personal use of technology to enhance those traits ➤ Robotics <ul style="list-style-type: none"> ○ Basic navigation and Subroutines <ul style="list-style-type: none"> ▪ Begin to code movement into the Boe-Bot and practice more coding ➤ IC3 Practice ➤ Life-Journey 	<ul style="list-style-type: none"> ➤ Liberal Arts <ul style="list-style-type: none"> ○ Malware <ul style="list-style-type: none"> ▪ Discuss malicious intent and explore the variety of malware to which cyber citizens may be exposed ➤ Robotics <ul style="list-style-type: none"> ○ Tuning Maneuvers <ul style="list-style-type: none"> ▪ Work through the Programming Design Process to refine movements with the Boe-Bots ➤ Cyber Society – Cyber Ethics <ul style="list-style-type: none"> ○ Digital Technology, Harms, and Trust <ul style="list-style-type: none"> ▪ Explore the relationship between advancements in military technology and the trust or distrust that develops when social media exploits those advancements 	<ul style="list-style-type: none"> ➤ Liberal Arts <ul style="list-style-type: none"> ○ Debates <ul style="list-style-type: none"> ▪ Assign groups & topics ▪ Allow students time to research ▪ Hold structured debates in class that discuss relevant cyber-security headlines ➤ Robotics <ul style="list-style-type: none"> ○ Infrared Navigation (CL) <ul style="list-style-type: none"> ▪ Construct a pair of infrared navigation circuits and use it to safely navigate the Boe-Bot around obstacles ➤ Guest Speaker – FBI/State Police 	<p>Field Trip to Eastman Chemical Company</p>

WEEK 3 – July 11 - 15, 2016

Monday July 11	Tuesday July 12	Wednesday July 13	Thursday July 14	Friday July 15
<ul style="list-style-type: none"> ➤ Liberal Arts <ul style="list-style-type: none"> ○ Debates <ul style="list-style-type: none"> ▪ Assign groups & topics ▪ Allow students time to research ▪ Hold structured debates in class that discuss relevant cyber-security headlines ➤ Intro to Humanities & Cyber <ul style="list-style-type: none"> ○ Learn about the connections between the physical person and the domain of cyber space ○ Learn about what it means to be a responsible cyber citizen ○ Discuss relevant improvements that cyber has made to life in general ➤ IC3 Pre-Test ➤ Robotics <ul style="list-style-type: none"> ○ Hello World 	<ul style="list-style-type: none"> ➤ Robotics <ul style="list-style-type: none"> ○ Infrared Navigation (CLII) <ul style="list-style-type: none"> ▪ Use the IR Circuits to trigger additional Boe-Bot responses such as speakers, LEDs, and additional movements ➤ Cyber Ethics Culminating Activity <ul style="list-style-type: none"> ○ Begin the project- Develop an overall ethical judgment on the benefits and costs of digital technology for theirs and future generations ➤ IC3 Practice 	<ul style="list-style-type: none"> ➤ Robotics <ul style="list-style-type: none"> ○ IR Programmable Remote (CLII) <ul style="list-style-type: none"> ▪ Use a programmablew remote to control the Boe-Bots ▪ Humanities content throughout the Robotics lessons will tie in at this point to malicious control of a wireless device ➤ Cyber Ethics Culminating Activity <ul style="list-style-type: none"> ○ Complete the project- Develop an overall ethical judgment on the benefits and costs of digital technology for theirs and future generations ➤ IC3 Certification 	<ul style="list-style-type: none"> ➤ Last Day of Camp *Certification Program 	