








## GRADE 5 COMPUTER EDUCATION SY 2019 - 2020 - 3rd Quarter

### Advanced Visual Programming using VEX IQ with Design Thinking

#### VEX IQ

- is a robotics platform designed to transform the STEM learning paradigm for young students and their teachers (grades 4-8).

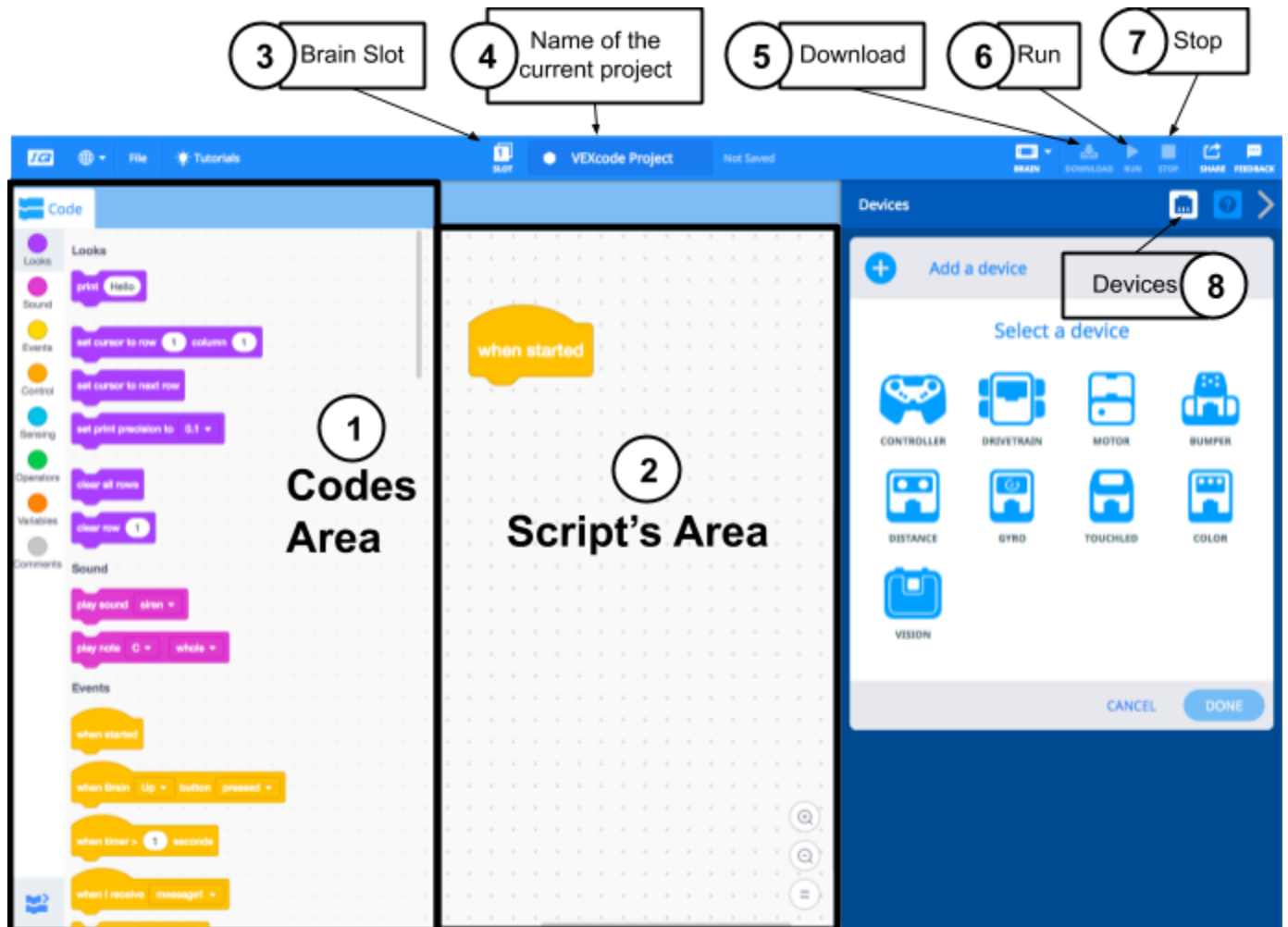
#### VEX IQ Parts (Initial parts)

<p><b>Smart Motor</b></p>  <p>module converts electrical energy from the battery into rotational energy.</p>	<p><b>Brain</b></p>  <p>this is where all your programs are stored. It will only recognize newly connected devices when first "powered up." If you connect, move, or disconnect any VEX IQ device - make sure to power your robot off and then back on!</p>	<p><b>Smart Cables</b></p>  <p>it is the one used to connect the different devices to the brain.</p>
<p><b>Battery</b></p>  <p>is where the energy of the robot is coming from.</p>	<p><b>Remote Controller</b></p>  <p>is the one used for controlling the robot.</p>	

## VEXcode IQ Blocks application

- is a graphical drag & drop programming environment powered by Scratch Blocks.

## VEXcode IQ Blocks Interface



1. Codes Area - is where all the codes are.
2. Script's Area - is where the program is being created.
3. Brain Slot - shows the options as to which slot of the brain will you download the program.
4. Name of the current project - the name of the current project.
5. Download - downloads the program into the robot's brain. The robot's brain must be connected to enable this button.
6. Run - plays the program while robot is connected through a cable. Used for debugging. The robot must be connected to enable this button.
7. Stop - stops the program while robot is connected through a cable. The robot must be connected to enable this button.
8. Devices - this is where you can see the other parts of the robot. If a device is added, the code designed for that device will be added in the Code's Area.

## For Videos and Tutorials, you may visit:

VEXcode IQ Blocks Tutorial Playlist:

<https://bit.ly/35BSFwZ>

Reference: [vexrobotics.com](http://vexrobotics.com)