Code Breakers (Grades 3rd-8th)

Calling all future coders, programmers, & designers! Learn the basics of coding languages like HTML, JavaScript, and CSS through a series of web projects and design challenges each day and be on your way to becoming the next tech star! Whether you want to be the next Mark Zuckerberg or the high school student who just made $1 million dollars for programming in his bedroom, this course has the essentials you need to begin your journey. Projects will be available on a Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years**.**

Drone Adventures (Grades 3rd-8th)

The Drones are here! Let the battles begin. In this hands on, interactive class you will learn how to fly and drive drone robots. Working in teams you will be able to code your drone to compete in missions that will prepare you for the ultimate team challenge at the end of the week. Students will work in pairs or teams for most of the program.

Make Your First 3D Video Game! (Grades 3rd-8th)

Try this new version of a Black Rocket classic! This class allows you to develop a game concept that goes well beyond the limitations of the traditional 2D game design classes and create an immersive 3D world. Students will learn the physics behind 3D games, explore beginner event scripting, level design, controlling flow of gameplay, and storytelling. Student created games will be available on a password protected Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.

MinecraftⓇ Modders (Grades 3rd-8th)

Use your favorite game to learn the basics of modding and foundations of programming. Learn scripting and logic statements as you create your first mods! Introductory coding will also be taught through a simulated environment inspired by Minecraft. Student projects will be available on a password protected Black Rocket website to share with friends and family. To access their project at home students must own a PC/MAC version of Minecraft. Tablet, phone, and game console versions of Minecraft are not compatible. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years**.**

Roblox Makers-Coders-Entrepreneurs! (Grades 3rd-8th)

Discover how to code in the Lua language while playing and designing worlds in ROBLOX®, an online universe where you can create anything you dream of. This new class combines game design concepts, coding, and fun! Young entrepreneurs will also learn how to navigate Roblox's fast growing marketplace to publish their games. Student-created games will be available on a password protected Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program.

Virtual Reality: The Future Is Now (Grades 3rd-8th)

Embark on an EPIC adventure in virtual reality! In this cutting edge class, you will learn the foundations of VR design by creating your own virtual worlds, exploring simulated environments, and crafting memorable 3D experiences. At the end of the week, take home your first cardboard VR headset to show friends and family the new worlds you created. VR projects can be viewed on a website or a mobile device. Students do not need a mobile device to take the class, but to use the VR headset at home a camper will need access to an Android or Apple mobile device. Students will work in pairs or teams and VR projects will be available on a password protected Black Rocket website to share with friends and family.

MinecraftⓇ Animators (Grades 3rd-8th)

Bring your favorite Minecraft characters to life in an animated short film! Learn how studios like Pixar and Disney make movies like *Inside Out* and *Frozen* by using techniques like key framing, tweening, texturing, and animating rigged 3D models! Student projects will be available on a password protected Black Rocket website to share with friends and family. You do not need to own a Minecraft account to use the software in this class. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years**.** Mac users can play their project at home, but will not be able to edit the project without a PC. Returning students can create more advanced projects that build on previous years**.**