## Dear Families,

I am very excited to be working with your student during our Integrated Technology class this school year! We will learn many wonderful things together and have fun in the process. I strive to use resources that may be accessed online for free, thus allowing your student access at home when desired. Your student will be comfortable navigating this site and will require minimal assistance. Entering kindergartners and Readiness students will need about a month or so to begin working more independently, but will then happily utilize classroom activities with minimal guidance from home. In addition to the online resources, the classroom uses Chromebooks primarily along with additional technology such as 3D printers, a Smartboard, etc.

Please feel free to contact me for any reason at <a href="mailto:ppaxton@armadaschools.org">ppaxton@armadaschools.org</a> (best method) or 784-2661. Please know that all calls go directly to voicemail during the school day, therefore I am typically able to respond faster via email.

Below you will find a summary of the key skills and processes explored this year with projects and activities content centering on the respective grade level curriculum across the different academic subjects. Technology skills are consequently integrated and developed through authentic tasks instead of being taught as a sequence of isolated skills.

Kindergarten/Readiness: Students will begin to learn the basics of keyboarding such as locating all of the letters, and the function of most commonly used keys such as the space bar, enter, and use of a mouse, etc.. Students will practice responsible use of technology systems and develop a positive attitude toward technology that supports lifelong learning, collaboration, and personal pursuits. Many of the activities focus on navigating Internet resources that support reading literacy, mathematics, problem solving, Cybersafety, etc in a game-based format. Additionally, students will be introduced to the use of a Paint program and learn how to use the various tools associated with the program to create original artwork. Generally students begin the daily lesson by learning a new skill, review and practice an old skill, and spend a few minutes each session in self-selected exploration.

**First Grade:** Students will build on the kindergarten year in much the same manner, and additionally begin to learn how to log into new resources. Simple projects such as creating a comic strip and writing the caption, research, etc. will be introduced. Age appropriate topics on Internet safety and citizenship will be introduced. A main focus of the year will be the use of Computer Assisted Instruction that tailors activities at an individualized level in reading and mathematics. The subscription based program, Freckle, may be accessed at home for free during the year and the login information will be provided once we start this program. Additionally, instruction on coding begins in first grade and will continue throughout the remainder of the elementary years.

**Second Grade:** In second grade we begin to transition to a more academically oriented use of technology. Students will be introduced to Google Drive and begin to learn basic word processing skills. Students will begin incorporating drawings, research, and other forms of multimedia into projects.. Formal instruction of keyboarding skills begins and proper technique/finger placement will initiate after the holiday break. The typing program "Typing Web" will be utilized from this point forward and will continue through the end of 5th grade. Students of

course may elect to use it at home for extra practice, and those students show substantial growth! Additionally, students will begin a course on introductory coding. The use of Freckle will again be offered, however, considerably less time will be spent with this program during the year.

**Third Grade:** Students in third grade will have access to their own personal Google Drive account and learn the various applications available. Extended projects will incorporate word processing skills, presentation software, and the use of spreadsheets. Further time will be spent on Internet safety and digital citizenship. Careful explanation of the Krause Technology agreement will occur and expectations set for appropriate use of school resources. Keyboarding skills are now formally monitored and technique practiced at the beginning of each session for about 10 minutes, with significant additional keyboarding practice embedded into projects. At the end of the third grade students have a target of typing at a rate of 15 words per minute or faster. Students will also spend time in a course on coding.

**Fourth Grade:** Students complete a joint research project with their classroom teacher and technology class. Word processing is covered more in depth with essays now ranging from 1-5 paragraphs, and students begin to complete assessments demonstrating basic proficiency in the program. Presentation software is explored beyond a slideshow and students begin to learn how to work with images, create animated videos, and other methods of communicating ideas. Additional topics on Internet safety and digital citizenship are introduced and students at this time become very familiar with the Michigan Cyber Safety rules (Keep safe, keep away, and keep telling). Keyboarding practice continues with the target of typing at a rate of 20 words per minute. Computer Assisted Design applications will be introduced and students will design and print an original and usable object on the 3D printer as we explore technology applications and the engineering design process.

**Fifth Grade:** Fifth graders will continue to complete extended projects that further develop technology skills. Word processing skills will include more nuanced features and students will exit fifth grade comfortable completing essays with embedded multimedia components independently. Presentation software skills will continue to be developed with projects focusing on research, inquiry, and communicating findings. Students will become comfortable collaborating on projects online with one another, using tutorials to independently further skill development, and complete a design challenge using the 3D printer. CyberSafety and digital citizenship is covered more in depth with connections made to age-appropriate life or current events. Students will create an original working app in a modified JavaScript programming language and program a Sphero. Keyboarding instruction continues with a fifth grader typing at the target rate of 25 words per minute or faster with an accuracy greater than 90%.by the end of the school year.

If you would like further detail of skills/projects covered by grade please do not hesitate to contact me! Mrs. Paxton