## **COMPUTER FOCUS – Gr. 7**

Teacher: Mr. J. Hiebert - Rm 157 jhiebert@wsd1.org

Unit 1 - Robotics Block- Each grade 7 class will go through a 6 to 7 week course on Robotics at different times during the year. Outline below.

Unit 2 - Creative Computing using Scratch - Coding - All year except when taking Robotics block.

Materials Needed:

- 1. Good attitude
- 2. WSD1 live account

Mantra for the Class - Your road to success is not easy. Every class you will experience something new. Be Persistent! Make mistakes, just make sure you learn from them.

I think.

I question.

I design.

I create.

I struggle.

I collaborate.

I try.

I solve.

I invent.

I reflect.

I Learn.

I am looking forward to an amazing year with you! Be on time, be prepared, and be ready to learn!

In Coding, Students will be **assessed** in a variety of ways. The end product is important and will be graded on their knowledge, skills and strategies demonstrated, but they are also assessed on the journey to that final product. Students will be assessed on how they collaborate with partners; how they deal with struggles during project: a) attitude - always trying, questioning, and thinking and b) troubleshooting strategies used; how they design, create, evaluate, and redesign; and finally to reflect on what they have learned from the overall process. The end goal for every student in my Coding courses is to not only be excellent problem solvers, but lifelong learners.

## Robotics with Coding course – Gr. 7 – J. Hiebert/W. Andres

Time allotted will be more accurate after session 1 with Jeff's first group of 7s. Time-saver - no rebuilds of the driving base.

In this unit, your child will use the Driving Base as a modular platform for learning the basics of building and programming autonomous robots. Each lesson introduces a new extension to be built onto the Driving Base. These extensions enable it to detect obstacles, move objects, follow lines, and turn by precise angles. The unit ends with a factory-themed challenge that will put your students' robotics skills to the test!

Assessment - In Robotics, Students will be assessed in a variety of ways. The end product is important and will be graded on their knowledge, skills and strategies demonstrated, but they are also assessed on the journey to that final product. Students will be assessed on how they collaborate with partners; how they deal with struggles during project: a) attitude - always trying, questioning, and thinking and b) troubleshooting strategies used; how they design, create, evaluate, and redesign; and finally to reflect on what they have learned from the overall process. The end goal for every student in my Robotics courses is to not only be excellent problem solvers, but lifelong learners.