EV3 Lesson Ideas

Lesson 1

Materials: EV3 robots- 2 per robot, Core Competency Self Reflection resources and posters, intro video: https://youtu.be/uz11s_JJayM

Objectives: Start to build robots, allow students to understand the thinking behind building and following a guide.

Duration: 1hour

Lesson: Intro

- Teacher introduces Robots, what they are, how they work.
- Explain goal of bots (collaboration, build, design and program) and the skills learned will also be designing and programming.
- Review what is in the tote (parts list at end of Build Guide Booklet), make sure to start charging the brick battery packs, make a charging plan if needed.
- Get students into pairs, they will work in the same pairs and will do Core Competency self-reflections at the end of each class- switch up the competency focus each week, ex. Week 1- Critical and Reflective Thinking, week 2- collaboration. Here are some documents to help create a reflection sheet or generate ideas on how you would like them to reflect, as well as posters to hang in your room
1.https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/assessment/developing-and-supporting-student-reflection-and-self-assessment-of-the-core-competencies.pdf
2.https://www.sd62.bc.ca/sites/default/files/docs/NEW%20Core%20Comp%20Intermediate.pdf
3. SD71 Portal – Learn71- Assessment and Reporting- Self Assessment Core Competencies.

Activity

- Once students are in pairs you will need to assign them a robot kit. They will get the same kit each week as their programming files will be on the brick.
- Then ask the class to open the kits and lay the parts sheet out in front of the parts tool kit. Ask everyone to open their build guides and together walk them through the build steps.
- Students will need to pay close attention to the images and placing their bot in the same positions as mistakes are easily made during the build.
- Make sure to point out a few of the parts that can be easily confusing- axel sizes specifically when at that build point.

- Once students are getting going maybe break the class down into a building group that works with the teacher and then another groups that wants to work at their own pace.
- Students will build for the entire block.

Concluding

- Students will pack up their kits- make sure all parts go back in the correct tray!!!
- Review the Core Competencies and ask students to make a reflection: verbal with partner, video recorded for portfolio, written…