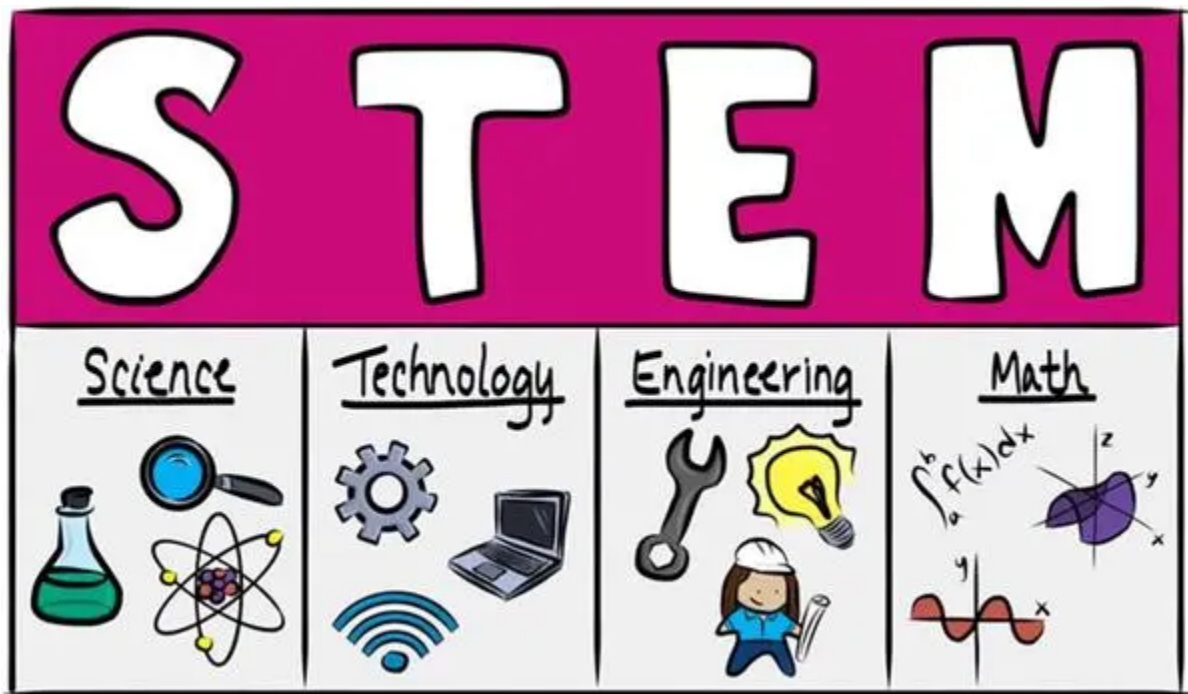




# MakerSpace Program

# What is MakerSpace?

At Malmo School we are so lucky to have a MakerSpace program that every student gets to take part in. The word MakerSpace encompasses many things. In the most basic terms, it means a space where students can gather and work together on a multitude of projects. These projects revolve around the STEM acronym. Science, Technology, Engineering and Mathematics. Students at Malmo learn about these subjects within their classrooms. They also have the opportunity to expand their knowledge in MakerSpace classes. Our MakerSpace is located in our library and is curated and facilitated by our librarian, Miss. Webber.



# Why MakerSpace?

MakerSpaces provide students with the opportunity to be innovative and creative. At Malmo, this is another way for us to provide hands-on learning to our students. The concept of a MakerSpace also helps students with critical thinking, problem solving skills as well as exposing them to new opportunities. Part of MakerSpace is experimentation, through this students learn how to make failure a learning experience. They are encouraged to fail in order to improve problem solving skills. MakerSpace is well utilized at Malmo. Teachers have the opportunity to split their class in half for a period each week. This time with teachers is called Learning Intervention. While teachers are in their classroom with a small group, Miss. Webber is in the MakerSpace with the other half of the class.



# MakerSpace Resources at Malmo

We currently have a wide range of resources used in MakerSpace. All of these resources and lesson plans tie into the Alberta Curriculum.

## LEGO

Students can use LEGO in many different ways. From building houses to animals, even using LEGO to practice math skills. Students in Division 1 work on basic building skills, while Division 2 students have the opportunity to use LEGO to create solar powered windmills, cars, etc.

## K'NEX

Similar to LEGO, K'NEX provides students the opportunity to build things from cars to bridges and roller coasters.

## STRAWS AND CONNECTORS

Our Malmo students love Straws and Connectors. Students from every grade have taken part in many challenges including building animals, houses and even rocket ships.

## BOTLEY

Division 1 students start learning to code using our robot, Botley. Learning to code is a fundamental skill for many jobs in the tech world. Students learn different commands to get Botley around our MakerSpace area.

## OZOBOTS

Division 2 students learn to code with Ozobots. These tiny robots use paper and colored markers to move around. Students learn how to control the OzoBots movements using special color coded sequences.

## SNAP CIRCUITS AND LITTLEBITS CIRCUITS

Students learn about connecting circuits. If they successfully connect all the circuits they can power fans and lights. For some students this is an introduction to electricity.

## BUTTON MAKING

Malmo students have multiple opportunities throughout the year to show off their art skills through button making. They are pinback buttons that students can show off on their clothes and backpacks.

## MAKE.DO

Make.Do introduces students to construction skills. Using cardboard, students use their imagination and plastic tools to construct houses, suits of armor and even animals.

## KEVA BRAIN BUILDERS

Challenging students to think outside the box is a key element of MakerSpace. Keva blocks are made of wood and can be stacked to create so many things. Students love the many challenges, from building bridges to impossible cubes.

## 3D PRINTING

Grade 6 students have the opportunity to create a nameplate and pencil holder using TinkerCad. A program which teaches students to create 3D models using basic shapes. TinkerCad is very similar to AutoCad, a program that architects and engineers use on a daily basis. Once their project is completed in TinkerCad, it can be printed with our 3D printer.

