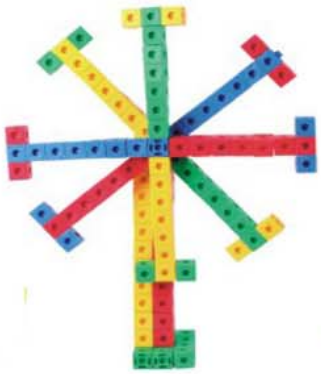
Let's Celebrate 100 days of school with

On Thursday you will rotate through 3 stations where you will be encouraged to create, tinker and build.

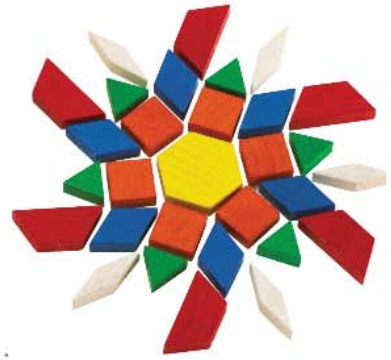
# BUILDING STATION



**At this station you will work in groups or by yourself to build something with 100 blocks or connecting cubes**

## What can you build with 100 connecting cubes?

castle house bridge tower robot spaceship



## What can you build with 100 pattern blocks?

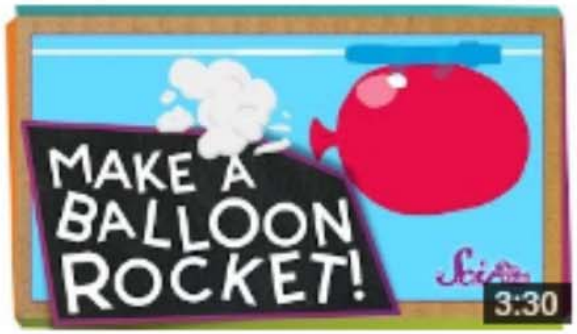
# TINKERING STATION

## Rocket Balloon / Rocket Propulsion

**At this station you will work in a team of 3, to build a rocket using only a balloon, straw, tape and line. Tinker with these items and make your balloon travel the fastest or the farthest.**

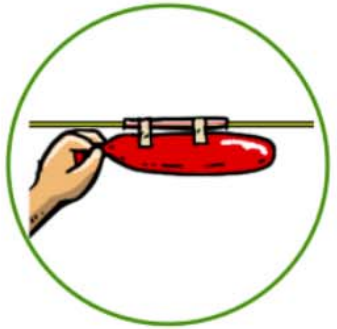
**Rules to remember:**

1. **Must use balloon pump to inflate balloon (less germs)**
2. **Do not over inflate your balloon (you don't want it to pop)**
3. **Each team is only allowed 2 balloons (choose your balloons wisely) and 2 straws**
4. **Work as a team and tinker away**



## HOW DOES IT WORK?

**So how does it work? It's all about the air…and thrust. As the air rushes out of the balloon, it creates a forward motion called THRUST. Thrust is a pushing force created by energy. In the balloon experiment, our thrust comes from the energy of the balloon forcing the air out. Different sizes and shapes of balloon will create more or less thrust. In a real rocket, thrust is created by the force of burning rocket fuel as it blasts from the rockets engine – as the engines blast down, the rocket goes up!**



## MAKE IT EXPERIMENT

**Try to answer these questions:**

**1. Does the shape of the balloon affect how far (or fast) the rocket travels?**

**2. Does the length of the straw affect how far (or fast) the rocket travels?**

**3. Does the type of string affect how far (or fast) the rocket travels? (try fishing line, nylon string, cotton string, etc.)**

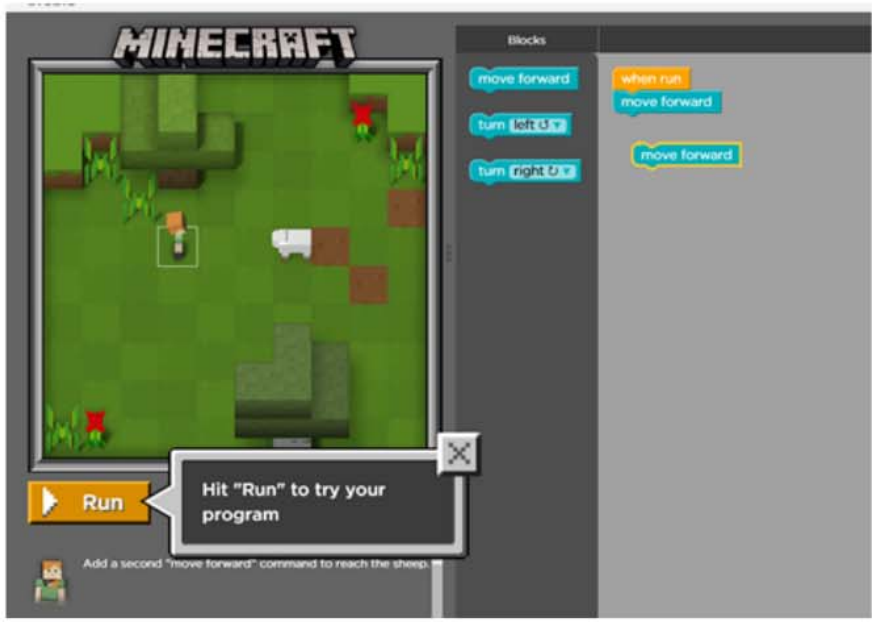
**4. Does the angle of the string affect how far (or fast) the rocket travels?**

# CREATING STATION

**At this station you will learn to code. Click on the video for a quick intro.**

## MINECRAFT Hour of Code

At this station you will connect command blocks to complete a task. Just like a puzzle, you will snap your command blocks together and then hit run. If it doesn't work you will need to debug your commands.




## Words to Know

- **Coding** - means to write code, or to write instructions for a computer.
- **Programming** - means to write code or instructions. Duirng this station you will program with blocks on the computer.
- **Debugging** - means to check code for mistakes and try to fix errors.

HAVE FUN