



Kai's Clan is a toolbox that can teach coding, robotics, Augmented Reality (AR), Virtual Reality (VR) and Internet of Things (IoT) in one-easy-to-use web platform.

Using the Mars Discovery Mat

A key component of Kai's Clan is being able to navigate the robots on one of the adventure maps using the **Cartesian Plane**. In Exploring Mars, the very first step in getting the Mars operation started, is getting the rover to move around Mars. You will need to program your rover to move around the surface of Mars, without driving into the cliffs or buildings! This lesson will teach you how to move around the surface of the Mars Map. You will gain a better understanding of **coordinates** and how the rover moves.

More ideas

[Lesson 1 - Exploring Mars](#)

[Lesson 1 - Cleaning Robot](#)



Space

Distance Tracker

Download the robot's position and speed data to make **graphs**, interpret the **data** and calculate things like the speed using distance and time. The robot logs its position every few hundred milliseconds, which means the data is saved multiple times per second. Use this data to log the robot's total **distance**, in order to figure out just how far and fast it moved.

More ideas

[Distance tracker](#)

Measurement

Statistics

Life support systems on Mars

Gain a better understanding of how Temperature and Humidity are related to each other, and how they can affect life in the habitats of Mars. Kai's Clan supports a range of different sensors to attach to the robot including the Thermometer and Humidity **sensor** to take readings and **collect data** of the current environment. In this activity students can measure the temperature and humidity of their school and classroom!

More ideas

[Life Support Systems](#)

Statistics