

Uses for the Robotic

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Math and Science uses for the Robotic Kit

The robotics kit can be used in different ways, because my mother is a math teacher, I came up with a way to use the kits for math (7th grade math). You can practically use every piece in the kit. Motors: motors can be used for volume since they're one of the few objects that are completely solid and whole (same thing goes with servos and most sensors). As for the pieces, you could use the pieces for building objects such as ramps. After the ramp is built one could measure the height and width of the ramp either to find its area, perimeter, volume, and slope. Kids could test the ramps to see which slope would make a match car go the farthest, and investigate why different slopes affect the distance. Different geometric shapes could be made to get the surface area and volume. Not only would the kids in class get to have fun learning but get used to using the Legos and how they fit together and work. This would be a daily activity, learning math and robotics at the same time, practically training the next year of Botball students. I also came up with a way to use the finished kits in science (8th grade science). When I was in 8th grade science we learned about velocity, mass, and acceleration. All of these can be calculated into robotics. In class, each teacher would assign an objective. The objective would be something that includes using your knowledge on velocity, mass, and acceleration. One objective could be to find the mass of an object, or perhaps they could measure the acceleration of a robotic car launched by a rubber band. Both science and math can use these used kits in their classes and still cover state standards. This is also a

great way to train the kids for Botball and have fun. I will present different objects that could be made and used in a math and science classroom to teach some of the state standards.