

2/12/18

Today's session started with a quick vocabulary review of the new parts the kids would be using in their mobile models.



The kids specifically reviewed the following terms:

lego brick-original stackable lego toy that connects together using friction between plastic pegs.

technic brick-a modified lego brick with circular holes in the center that allows for axles to pass through or for pins to be inserted.

axle-a piece that allows for rotation and can be connected to motors, hubs and other peices with the cross connector.

motor-a device that generates rotational motion from electiricty.

belt-an elastic, yellow or red, that is used to connect belt wheels to other belt wheels or half bushings.

belt wheel-a transparent blue wheel with a center groove that keeps the belt aligned

half bushing-a small yellow peice that connects to an axle to hold it in place or to connect with a belt using the groove in the half bushing.

full bushing-a grey piece that holds axles in place and can also be used as a spacer.





After the quick review, the teams set out to build the Max the Mobile model. Most of the students also built this model last year. Once the models were built and tested, Coach Fitz demonstrated how the teams could add a second axle to have multiple turning points. This is an example of converting a single output to multiple outputs.

The teams were a little pressed for time but they still found a way to customize their builds in order to express themselves. Please check out the videos below which showcase the different robot builds.

<https://youtu.be/6vG5njXS2gw>

<https://youtu.be/dAHngbFcRdU>

[https://youtu.be/wK1QB\\_thFw0](https://youtu.be/wK1QB_thFw0)

[https://youtu.be/\\_jxeTelExYQ](https://youtu.be/_jxeTelExYQ)

<https://youtu.be/xn7JiJm5NiU>

<https://youtu.be/XNhXRyJeMWY>

In the next lesson, the students will learn to use spur gears to power their Rory the Rover model. With any luck, the students will have time to evaluate the impact of changing the order of the gears with the driving gear being larger and then small than the following gear.