

This is the  
robot games



# Our strategy

- Our coders decided to add an extended arm to the robot so that it could complete the first missions that they chose to do. We decided that we would do the most efficient missions first.
- They also decided to do mission 3 first so that that they could find out how the extended arm was going to work.

# Extensions for our robot

- We have a few extensions such as a colour sensor, distance sensor, extended arm and a bumper.
- The colour sensor helps the robot follow the black and white lines to get it to where it needs to be. This is very efficient because the robot becomes more reliable.
- There is also a bumper that is very helpful, especially for the power storage mission.
- The bumper is also very useful because it can push things in which is beneficial in the Solar farm and Watch TV mission.
- The arm extension can pull and lift different mechanisms to score points and complete missions.

# Our robot design

This is one of the 3 motors that help to make the robot more efficient.



These are 2 arm attachments that we can put on and take off for different missions.

This is the colour sensor that we can use to follow the black and white lines on the mat.



# Energy Storage - Mission 3

- First we have a colour sensor to track the black and white line and a bumper to help the robot know when to stop. We added an extended arm to pull the the energy unit out to score points.

## Solar farm - mission 4

- We added a barrier extension to our arm on our robot to help it push the energy capsules out of circles located in the middle of the solar farm to score points and succeed through the robot games.

## Watching TV - mission 8

This was the simplest mission to complete so far.

After doing the solar farm mission, we carried the robot over to the home base on the right.

Then we programmed it to move forward and push the characters forward which then causes the TV to rise and score points, then the robot must return to base when the task is completed.