

# Radioactive Waste Clean Up

A radioactive meteor has just landed in Montville. Unfortunately it broke apart and landed in many pieces. Luckily the debris landed in small wiffleball like clusters in only a couple of areas in town. To keep the citizens of Montville safe the government is asking the students of the MHS robotics class to create robots that will clear the debris from these areas. Since the debris is highly radioactive each team will have to operate their robot from a remote location. If the robot spends more than three minutes in close proximity to the debris it will become contaminated and cease to work. The robot must pick up each piece and place it in a lead protected area. Each team must consider the terrain and the size of the debris in the design. Please save our town!!!

## Rules

1. Teams of 2-4 students
2. Teams can use Vex controllers and other objects approved by the instructor. Each extra item must be listed in a bill of materials.
3. There may be obstacles in the field of play.
4. You cannot damage another teams robot.
5. Team members cannot communicate from the playing field to members in the control room.
6. Each team member has to contribute to the engineering notebook.
7. One point will be awarded for each radioactive ball placed in the lead container. Three points will be awarded for placing each wooden block in the lead container.

## Assessment Rubric

	Points	Team	Teacher
Quality of the Design	50		
Safety and Design Consideration	50		
Performance / Final Operation	50		
Workmanship	50		
Proof of planning	50		
Engineering Design Notebook	100		
<b>Total Points</b>		<b>350</b>	
Team + Teacher / 2 = Average		Average	<input type="text"/>

## Self Evaluation

- 0- Not Attempted
- 10- Incomplete
- 20- Needs improvement (robot works but does not place anything in container)
- 30- Adequate (one of two objects were placed in the container)
- 40- Good (robot works consistently)
- 50- Industry Standard (excellent!)