Risk Identification

This assessment considers any hazards specific to the activity greater than every day hazards such as slipping, tripping or falling on stairs, trapping fingers in doors and cuts and bruises which are inherent in all environments.

Provider	**Hills Road Sixth Form College Robotics Team**		
Activity Description	Robotics Demonstration		
Who will be exposed to the hazards	Visitors, participants		
Hazard	Severity and Likelihood.	Control measures	Risk rating after control measures applied.
Electrocution	2*2	The robot runs from a 12V dc battery so the chance of electrocution is minimal, but one except the team will be allowed to touch the robot directly. There are remote cut offs to ensure the safe handling of the robot.	2*1
Injury through contact with the robot	2*2	The robot will be driven within a controlled area, clearly identified. There is a master cut of switch under control of the team at all times, even when the robot is being driven by novice drivers/visitors. The cut-off switch disables the robot immediately.	2*1
Injury through collision with the robot	2*2	The robot has a speed restriction included in it's code so that visitors can only drive it at reduced speed (1/4 of full speed). Full speed demonstrations will only be performed by the experienced Hills Road team.	2*1
Trip Hazards	2*2	All wiring and cables for power to the control base will be directed safely to minimise trip hazards.	2*1

Risk Identification

In order to calculate the risk to health, we consider the nature of the activities, the potential hazards and the likelihood of occurrence. We then consider the control measures we need to put in place to minimise these. Then in order to calculate how high a risk an activity is, we score the hazard severity by the likelihood of occurrence on a scale of 1 to 5 and multiply the two figures together.

Hazard severity
1. No risk of injury
2. Slight (minor injury requiring first aid)
3. Moderate (injury resulting in 3 days off school/work)
4. High (causing death or serious injury to an individual)
5. Very high (causing multiple deaths and widespread destruction)

Multiplied by

Likelihood of occurrence
1. Not likely (only under freak conditions)
2. Possible (if other factors are present)
3. Quite possible (if other factors precipitate it)
4. Likely (with other effects or sheer carelessness)
5. Very likely (an accident waiting to happen)

A multiplied score of 1 means there is no, (or little) hazard, and no (or a very unlikely) likelihood of it happening any more than a child falling over their own feet. Formal written risk assessments for a multiplied figure of 5 or less would not normally be carried out in most organisations (other than a mental risk assessment), though for schools we provide a written brief to demonstrate that we have considered the potential hazards, even though we may have come to the conclusion that there are no significant risks. A figure of 25 (5x5) would mean that the hazard was great (life threatening) and the chances of it happening very likely. The control measures demonstrate that the hazards and organisation of the activity have been carefully considered and by having these in place, the likelihood of occurrence will be less.