

## Robotics Level VI

**Advisor:** James Schneider

**Membership Criteria:** Students in grades 4 - 9 who have an interest in learning more about programming and building robots. Students must also join 4-H to participate as they help sponsor the teams. Teams are limited to 10 kids but must have at least three to participate. Ideally, the teams would have around 5 - 6 members. This year we plan to have 3 or 4 teams.

**Goals:** The goals of the robotics program is to foster learning about robotics and programing and how to apply that to real-life problems. The program also gives an opportunity for students to show that knowledge in a competition.

**Budget:** The cost of the robots, entry fee and game boards for program are being covered by grants written by Koochiching County 4-H and Northome Northern Lights 4H club. As coaches, we have received donations from: Northome VFW, People in Business Care, Upper Red Lake Association, Northome PTO, and the Northome Northern Lights 4H club, and several local businesses.

The cost of the coaches will come from Northome School. Also, we potentially would ask the school to supply a sub for a day and provide transportation to the state tournament as well as one night at a hotel for the coaches and students at the state tournament.

We also ask that the school to again provide a janitor for the tournament that is hosted at the school as done in the past.

The participants typically have sold flower bulbs to help raise money for the program in the spring. They were also asked to work the food booth at the Koochiching County Fair.

See cost listed at end of proposal.

**Planned Activities:** Robotics will meet for several study sessions for practice in preparation for the competition. Practice time will be split between building/programming the robot and doing a research project. We predict about 45 practices weather permitting.

**Practices:** Practices will be held after school two days a week trying to accommodate all the schedules.

**Student Participation:** We have yet to sign up participants at this point. We plan to have three teams. This may change depending on who is involved.

**Time:** The time required for me as an advisor outside of the school day is

as follows.

90 hours	-- Practices
1 hours	-- Introductory meeting
4 hours	-- Coaching Meetings
4 hours	-- Programming Day Event
12 hours	-- Regional Competition
(2 Days	-- Section Competition)
111 hours	Total (159 hours if we compete at Sections)

## Robotics expenses for one team (based on 2018 data):

Registration for one team	\$225.00 (covered by 4H)
Kit	\$ 65.00 (covered by 4H)
Team shirts	\$ 20.00-40.00
snacks	\$270.00 (about 6.00 a practice)
Janitor of tournament	\$? (covered by school)
Regional Tournament	\$? Transportation to event site if we do not host the tournament

**If able to go to sections / state:** (double if a second team makes it to sections, or triple if a third team makes it to sections)(state would be the next level and costs would be the same as sending a team to the section tournament)

Registration for a team	\$ 100.00
up to 4 motel rooms for two nights	\$ 500 a night (school paid for 1 night)
Day for a sub	\$ 110.00 (school paid for)
mileage ..... $267 \times 4 = 1068$ miles	\$ ??? (school paid for)

## Robotics Level VI

**Advisor:** Second coach if numbers are warranted and a person can be found.

**Membership Criteria:** Students in grades 4 - 9 who have an interest in learning more about programming and building robots. Students must also join 4-H to participate as they help sponsor the teams. Teams are limited to 10 kids but must have at least three to participate. Ideally, the teams would have around 5 - 6 members. This year we plan to have 3 or 4 teams.

**Goals:** The goals of the robotics program is to foster learning about robotics and programing and how to apply that to real-life problems. The program also gives an opportunity for students to show that knowledge in a competition.

**Budget:** The cost of the robots, entry fee and game boards for program are being covered by grants written by Koochiching County 4-H and Northome Northern Lights 4H club. As coaches, we have received donations from: Northome VFW, People in Business Care, Upper Red Lake Association, Northome PTO, and the Northome Northern Lights 4H club, and several local businesses.

The cost of the coaches will come from Northome School. Also, we potentially would ask the school to supply a sub for a day and provide transportation to the state tournament as well as one night at a hotel for the coaches and students at the state tournament.

We also ask that the school to again provide a janitor for the tournament that is hosted at the school as done in the past.

The participants typically have sold flower bulbs to help raise money for the program in the spring. They were also asked to work the food booth at the Koochiching County Fair.

See cost listed at end of proposal.

**Planned Activities:** Robotics will meet for several study sessions for practice in preparation for the competition. Practice time will be split between building/programming the robot and doing a research project. We predict about 45 practices weather permitting.

**Practices:** Practices will be held after school two days a week trying to accommodate all the schedules.

**Student Participation:** We have yet to sign up participants at this point. We plan to have three teams. This may change depending on who is involved.

**Time:** The time required for me as an advisor outside of the school day is

as follows.

90 hours	-- Practices
1 hours	-- Introductory meeting
4 hours	-- Coaching Meetings
4 hours	-- Programming Day Event
12 hours	-- Regional Competition
(2 Days	-- Section Competition)
111 hours	Total (159 hours if we compete at Sections)

## Robotics expenses for one team (based on 2018 data):

Registration for one team	\$225.00 (covered by 4H)
Kit	\$ 65.00 (covered by 4H)
Team shirts	\$ 20.00-40.00
snacks	\$270.00 (about 6.00 a practice)
Janitor of tournament	\$? (covered by school)
Regional Tournament	\$? Transportation to event site if we do not host the tournament

**If able to go to sections / state:** (double if a second team makes it to sections, or triple if a third team makes it to sections)(state would be the next level and costs would be the same as sending a team to the section tournament)

Registration for a team	\$ 100.00
up to 4 motel rooms for two nights	\$ 500 a night (school paid for 1 night)
Day for a sub	\$ 110.00 (school paid for)
mileage ..... $267 \times 4 = 1068$ miles	\$ ??? (school paid for)