



Central Valley Robotics

# Judging Profile for Team 25589

Team Name: "Smartadoodles"

## Project Information

We were unsure where to begin when we received the challenge this year and started by getting ideas about current challenges being faced by talking with speakers from; \* The Department Of Water Resources \* Provost and Prichard (a civil engineering company) \* The Fresno Irrigation District When we spoke to Heather Bashian, a civil engineer, we learned that arsenic and nitrates are common contaminants to well water in our area. Since one of our team members uses well water at home, we thought this would be a good topic for our project because people don't pay attention to professionals because their water looks and tastes fine. After more research we realized that these invisible contaminants cause real health problems. We surveyed private well owners to decide what we should do. We Invented the Hydro-Test-a-Doodle which is a refrigerated inline tester that tests for Nitrates and Arsenic which is known to cause bladder cancer and blue baby syndrome (When a baby doesn't get enough oxygen) and then colors the water to alert people. To test out our idea we developed a model using a color sensor, a large and medium motor, and an extra ev3 brick. We shared this invention to many private well owners and professionals from; \* Wetlands Water District \* Fresno County Environmental Health Department \* APPL labs \* San Joaquin Valley Concentrates \* California Department of Water Resources \* California Water Board Division of Drinking Water.

## Core Values Information

WE ARE A TEAM! - One of our favorite things we do is Instant Challenges. We get to work together as a team, using our individual strengths and, most of all, WE HAVE FUN!. It has helped us during the challenges we've faced while working on the robot game and project. We share our core values at practice while we eat. We talk about how we use the core values outside of robotics. Things from school and soccer and all our other activities come up. This year, since we are in fifth grade, we have taken more responsibility for running our team meetings. We divided up by what we were interested in. Everyone works on everything, but we have robot leads, project leads, and one project manager who keeps us on track.

## Fun Facts

\* We are an all girls, 5th grade, robotics team from Bud Rank Elementary School. \* This is our second year in FLL. \* We are involved in a lot of other activities besides robotics. \* We earned the Judges Rookie Award at last year's LEGOLAND Open Championship. \* Our motto is, "Our brains are big because we are the Smartadoodles".

## Team Roster

Name	Role
Coach Name	Coach
Coach Name	Coach
Site Coordinator Name	Site-Coordinator
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Student Name	Team Member
Coach Name	Co-Coach

## Team Photo



## Robot Photo



## Robot Design Information

Robot Name: Smartmover 4.0

Our robot motto is... Keep It Simple Smartadoodles (KISS). This following list includes some important things about the Smartmover 4.0. \*We chose to eliminate attachments this year and built a smaller robot to help maneuver more easily around the field. \*We are not as dependent on line up as last year because we use our two color sensors to consider where we are on the field. \*We use a medium motor to activate a worm gear, which controls our most important feature on our robot... the SlideFlapper. \*We use the SlideFlapper for most of the missions... It is used for most of the water barrels as a slide and once the barrel is in position it will flap down the barrel. \* We use a button press (Home Button) to link all of our missions instead of looking through an excessive amount of missions.