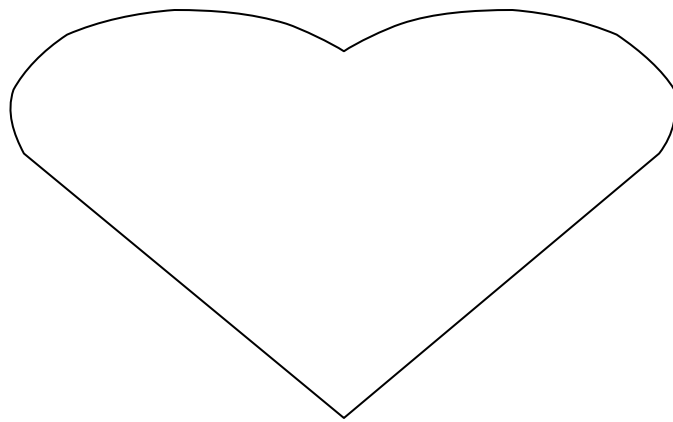


KIDS



ROBOTS

Finalists in 2007 Real Cool Robot
Design Contest
Coloring Book

By MOE 365

Kids Robots

When we meet and talk to kids at schools and libraries and community events, they think of robots as cartoon creatures or machines of immense power and danger. And they always want to give us ideas about how to build our robots!

We decided to show them that robots are real. They are real cool tools and great helpers. We made a folded book about a few of them- Spirit and Opportunity, the Mars rovers, Asimo, the walking robot, and others. We decided to ask the kids to think of a real problem and design a robot to solve it. We made it a contest.

These are the 2007 finalists from MOE 365's Real Cool Robots contest. We received robot designs from kids everywhere. Here are a few things they taught us.

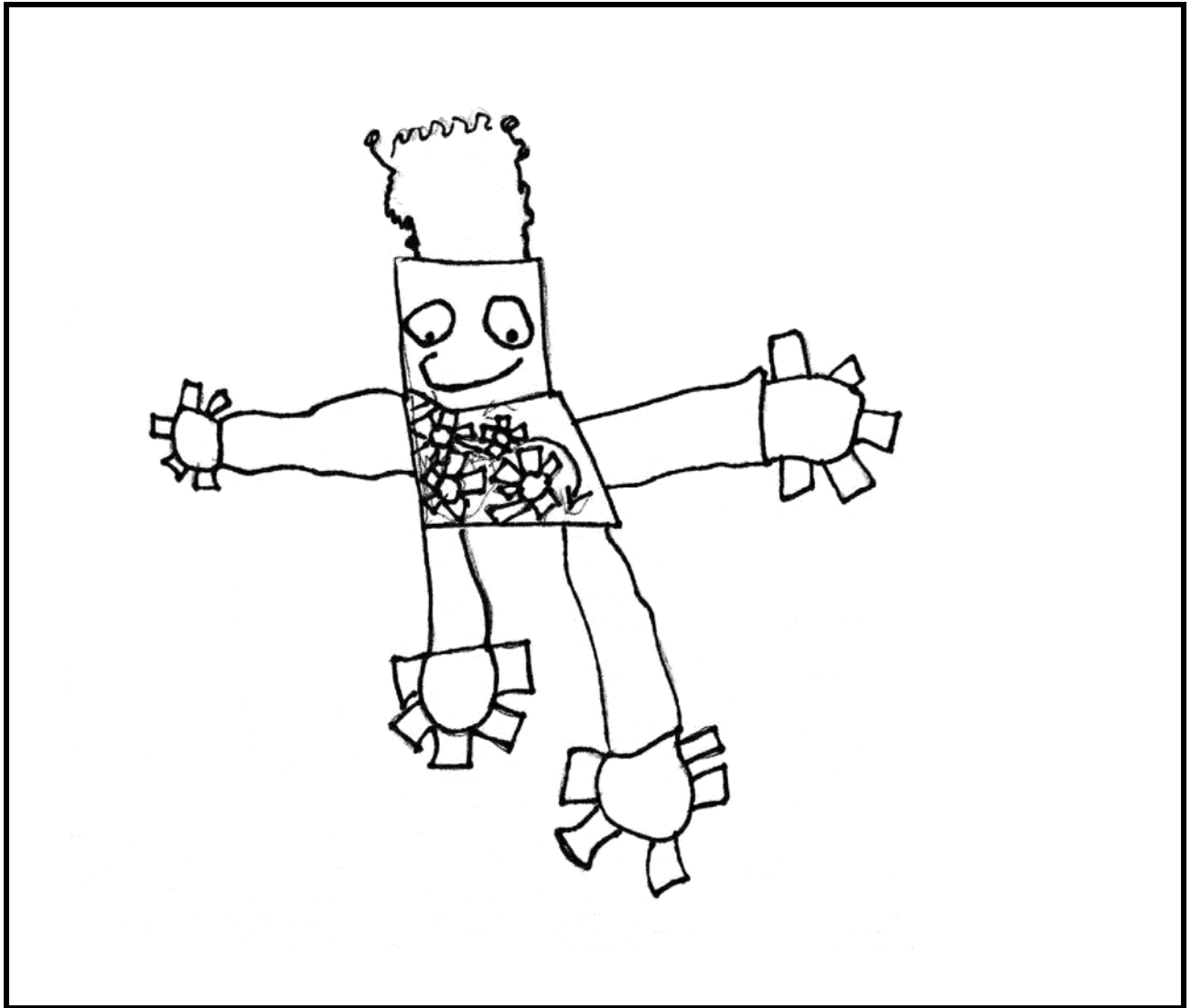
1. Kids are funny and kids are creative.
2. Kids understand that motion and weight are considerations in mechanical designs.
3. Kids can apply things they learn in school to solve problems.
4. Kids want to make the world a better place.
5. Kids LOVE robots.

At the end of this coloring book, there are pages to design a robot or two of your own. Then, if you want to learn more, you can find out about FIRST teams in your area- teams like ours! We're MOE 365- the Miracle Workerz- and we build robots!

www.usfirst.org- For Inspiration and Recognition of Science and Technology-National and international programs for kids of all ages to design, build, and compete with robots.

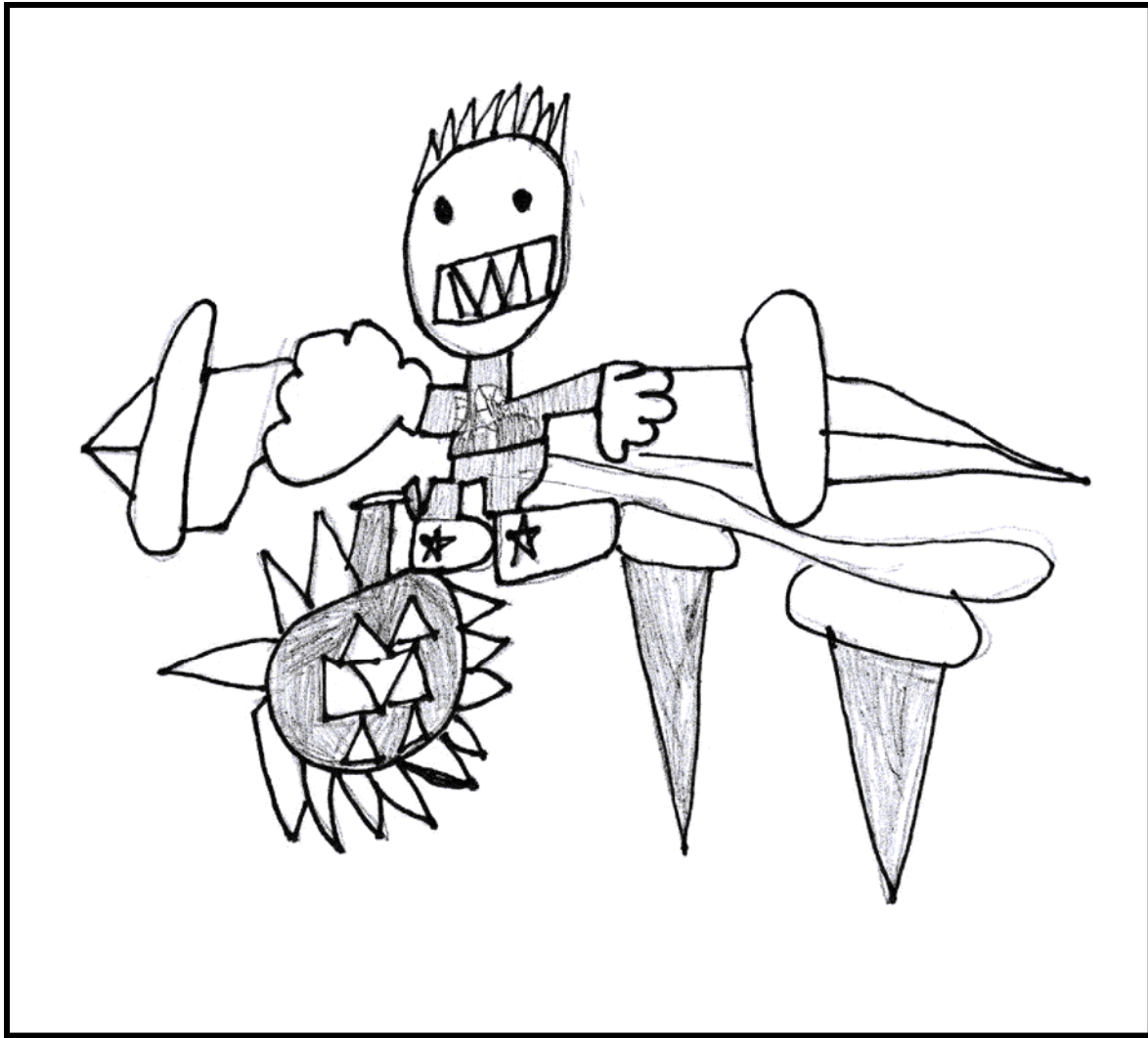
- Jr. FLL for elementary ages 6 to 9
- FLL for kids age 9 to 14
- FVC and FRC for high school age kids

www.moe365.org- Miracles of Engineering- High school team of students from three states (based in Wilmington, DE) who compete in FIRST Robotics Challenge.



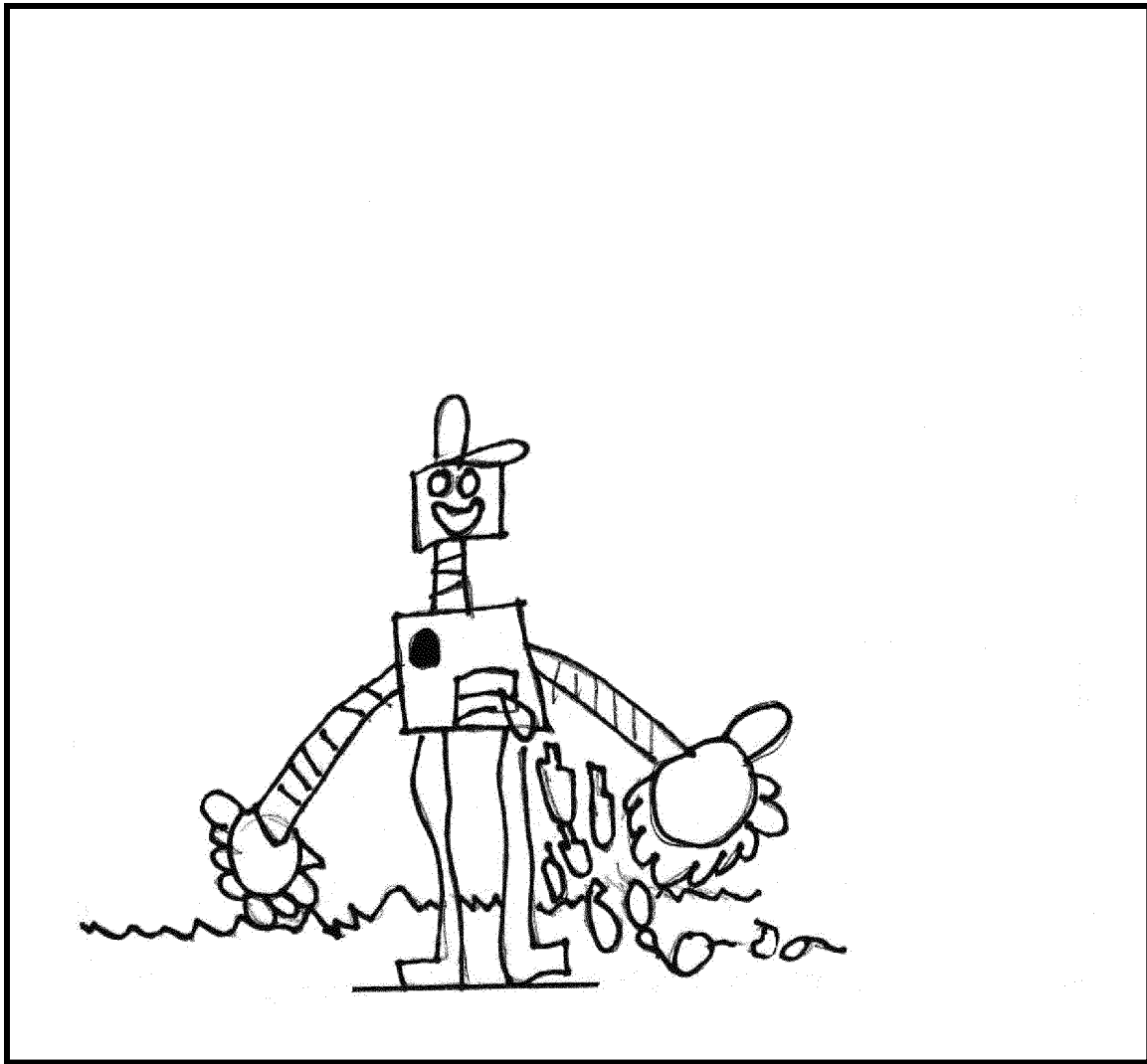
Rob E (pronounced “Robbie” which is short for Robot Electricity) is my cool robot. It can pick up stuff and electrocute it and makes it disintegrate. It uses gears to move and work. By Daniel- Kindergarten

MOE says- We liked Rob E because of his many gears and his arcing electric current! Sometimes people call the kids on our mechanical team “Gear Heads.”



Peter is my cool robot. It can fly and jump up stairs. It uses lasers to cut metal. By Matthew - Kindergarten

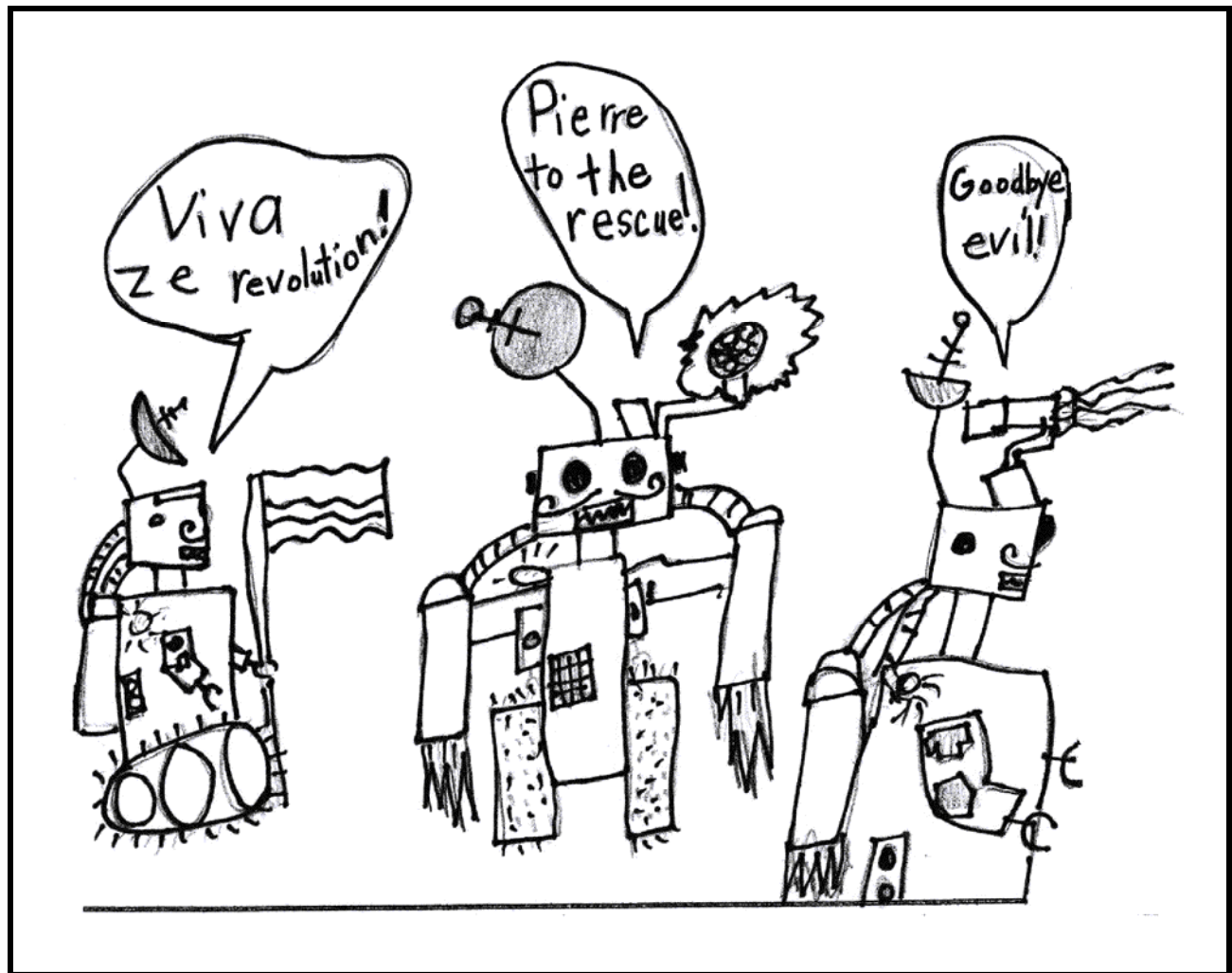
MOE says- Peter seems like a pretty powerful robot. We think he'd be good to have if we ever got trapped. He would cut us loose and we'd fly away. His spikey hair and the stars on his shoes show confidence! Go Peter!



Cleaninator is my cool robot. It can suck up leaves and cut the lawn. It uses blades on its hands to cut grass and vacuums the leaves into its belly.

By Michael- First grade

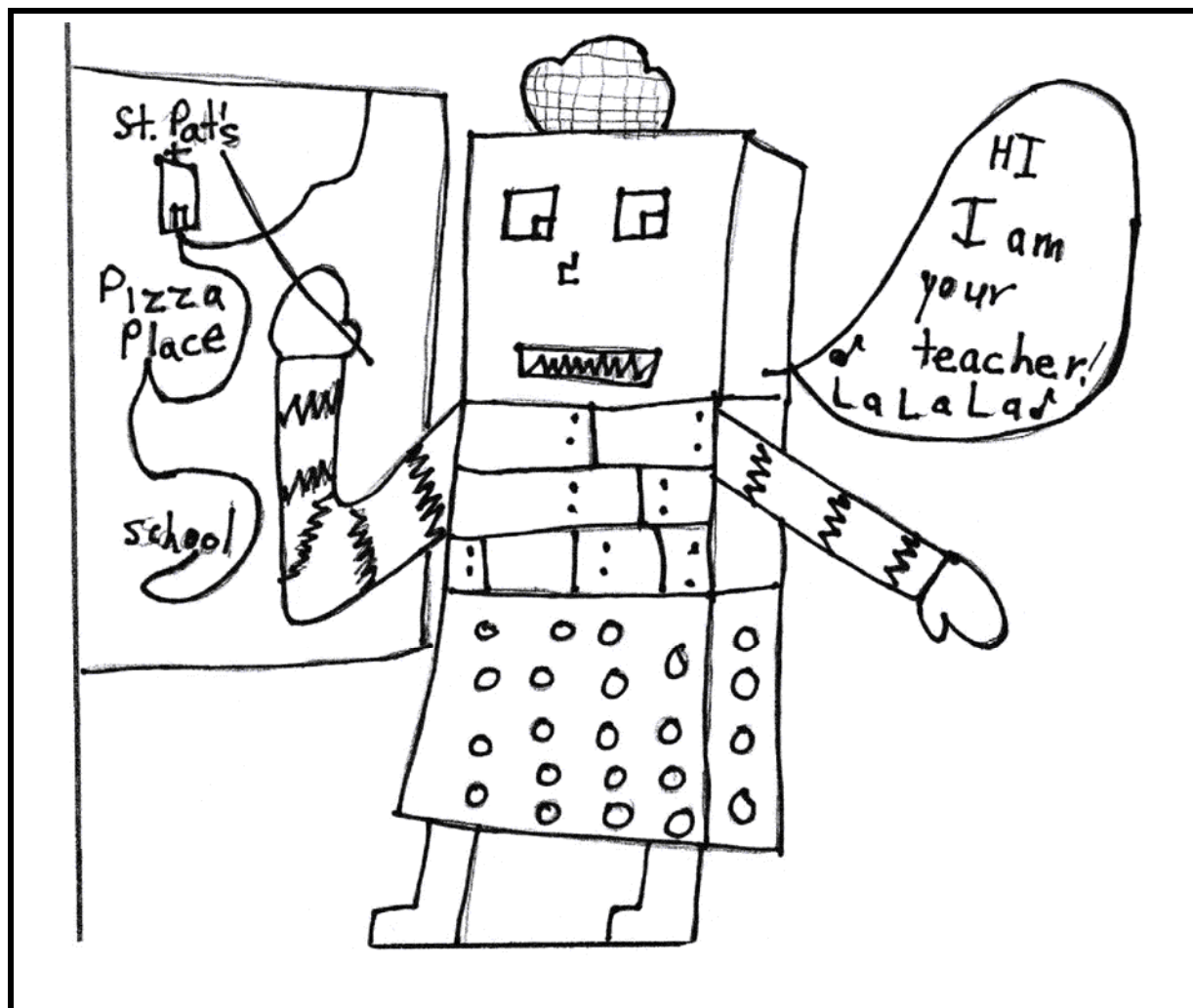
MOE says- This is a great robot and we can't wait to get one. Don't let it suck up the Frisbee or the football you lost last summer!



Pierre is my cool robot. It can fly, shoot, save people, and he can go 500 MPH. It uses knowledge and fuel to power itself and reload.

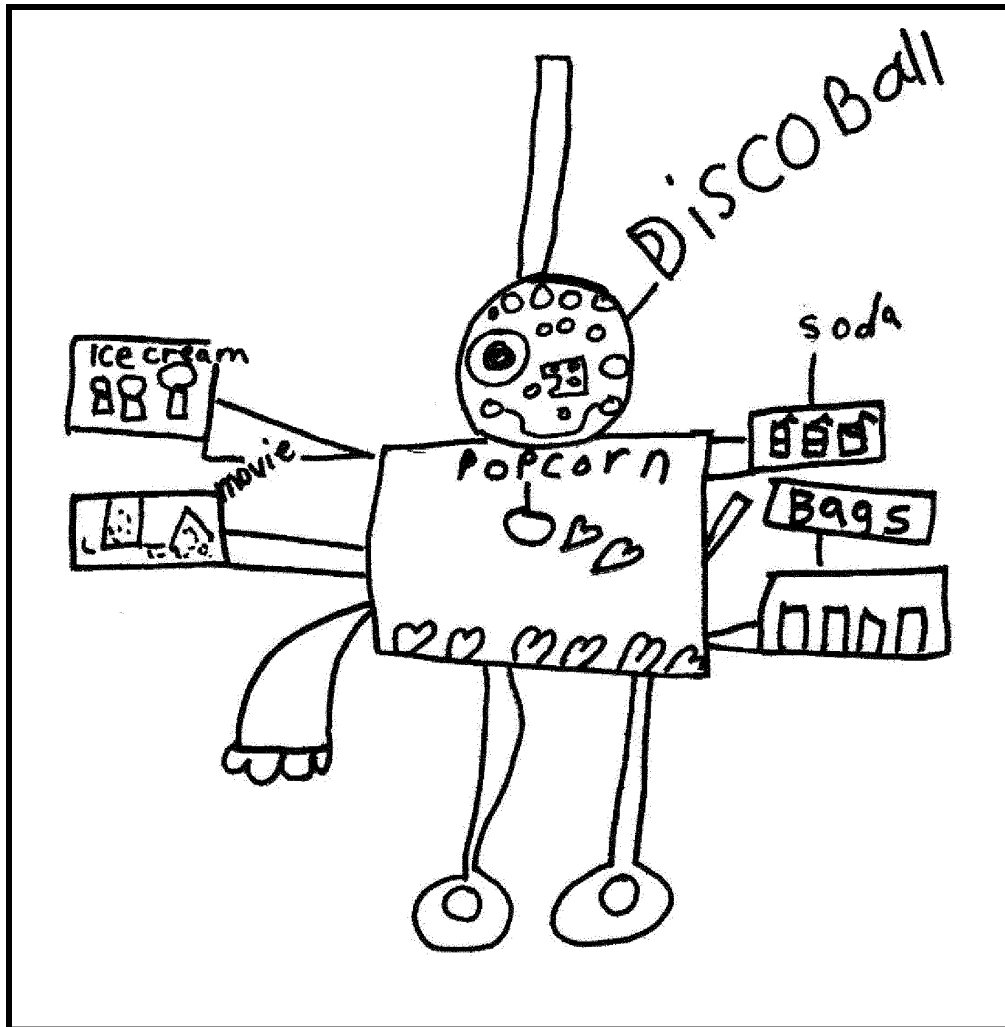
By Jessie- Third grade

MOE says- Pierre was designed for this contest with front and side views. We design our robots in 3D, too, so we can see how the systems fit together. Pierre's jets and treads show that you are thinking. His rivets, claws, and satellite dish are great details, too. We love his moustache and French accent the best!



Miss Chris is my cool robot. It can teach and sing. It uses a stick to teach with maps.
By Gia- Third grade

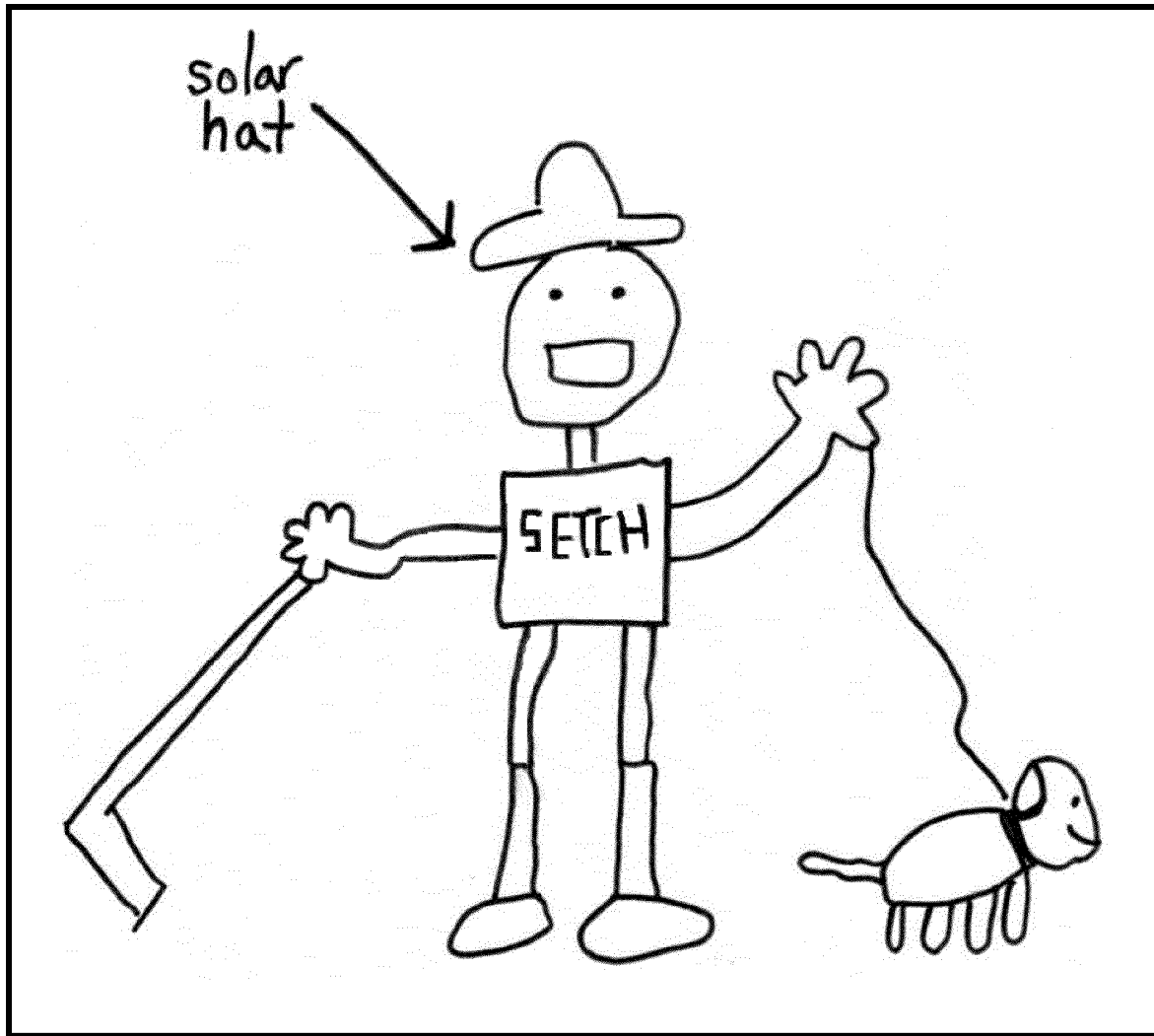
MOE says- Miss Chris looks like a great teacher-bot. She is not so hard to imagine. Did you know that people are already designing caretaker bots to help the elderly? Her dress is cool, too. Are those bolts and rivets? Some girls who build robots (called Robo-chicks) make skirts and jackets from duct-tape!



An entertainment robot is my cool robot. It can pop popcorn, serve soda, play movies and give ice cream. It uses wheels to move around and show movies.

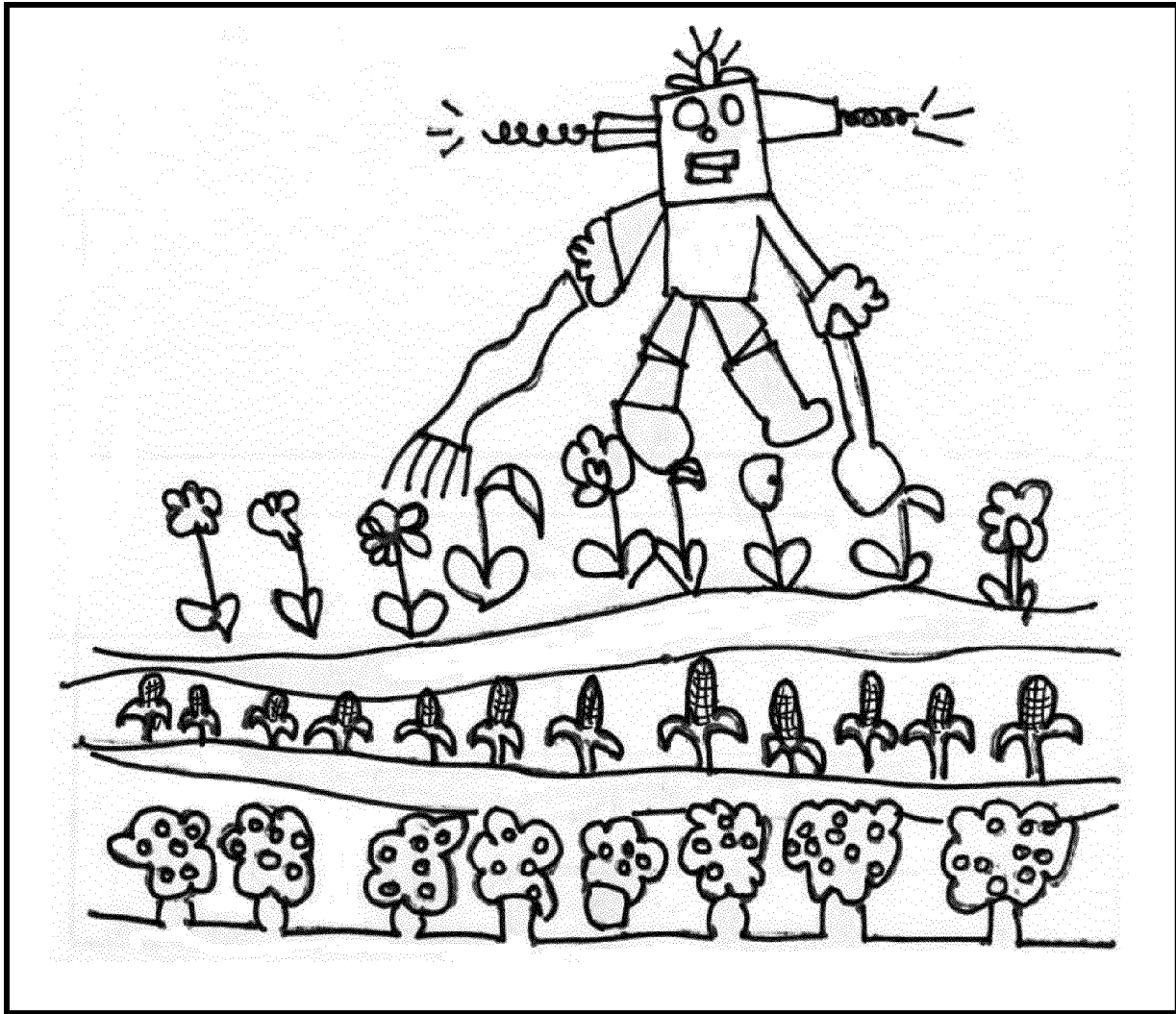
By Riley- Second grade

MOE says- This bot rocks! His disco ball head is the best. We can imagine a vision sensor and a face recognizer in its bright eye. Then it would be able to remember and serve your favorites to you every time. Yum!



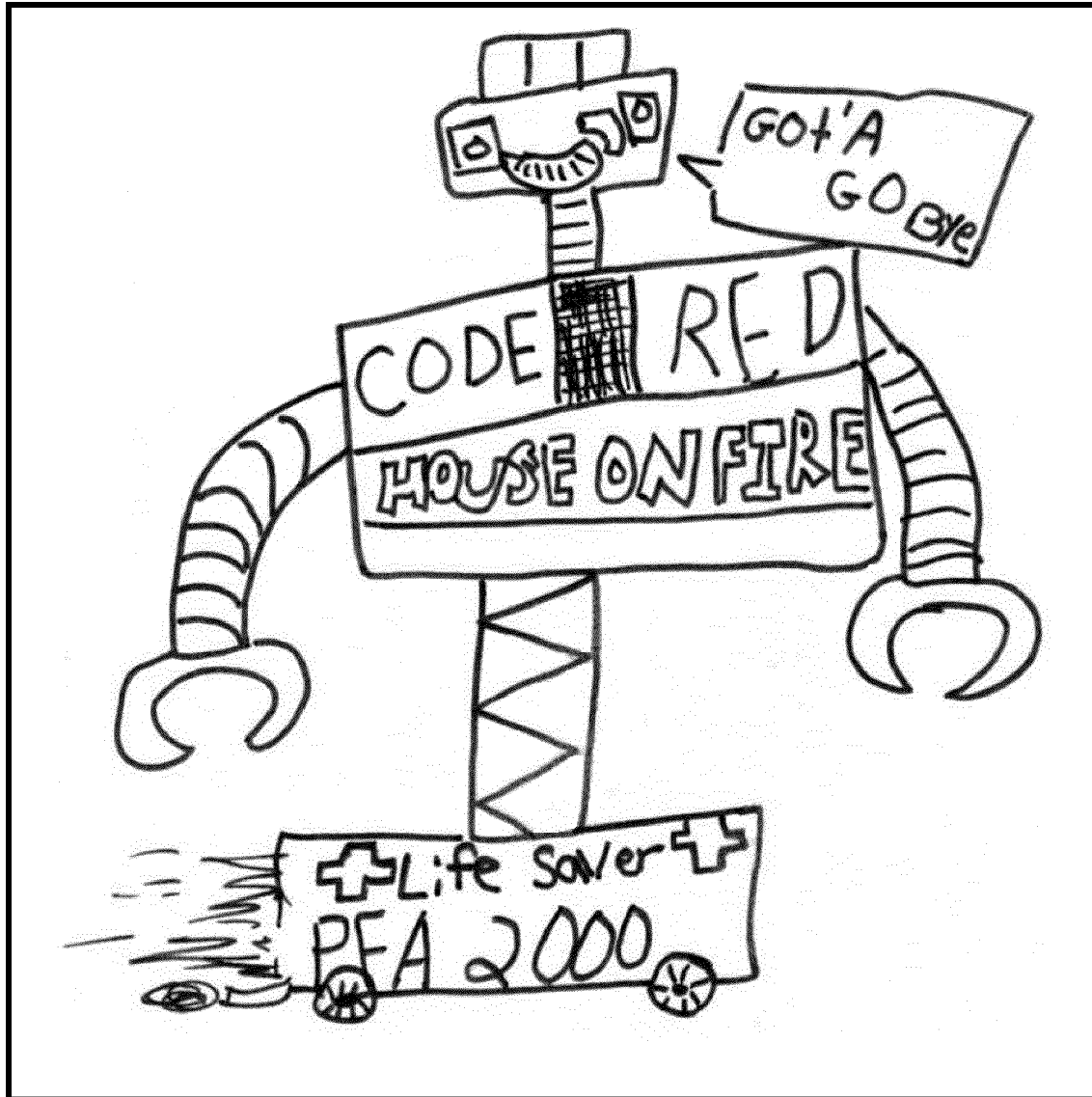
Setch is my cool robot. It can play street hockey and walk the dog. It uses solar energy to make it move. By Parker- Third Grade

MOE says- Solar hat! Great idea! Does Setch always win at street hockey? Can it be on our team?



David is my cool robot. It can dig with shovels and spray water. It uses tools to help in the garden. By Rebecca- First Grade

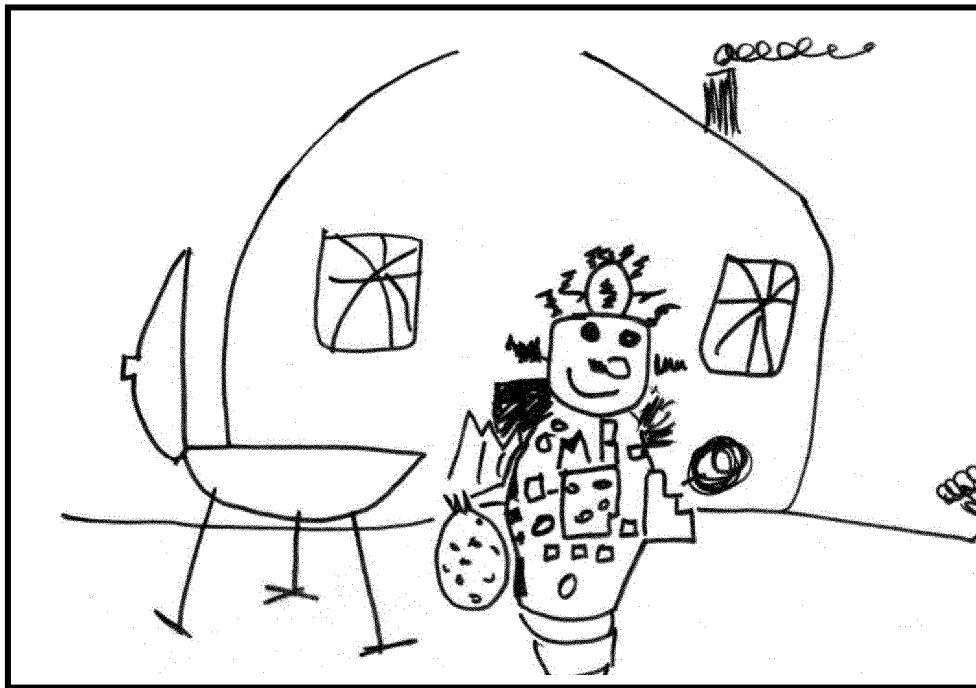
MOE says- David must be a great gardener. Look at his garden grow! Agricultural engineers use science to help us grow healthier, stronger crops. They use special tools to help do this. David would be right at home on that job.



The PFA 2000 (Police, Fire, or Ambulance) is my cool robot. It can do whatever police, fire, or ambulance can do and be a big life saver. It uses its lights and wheels to get out of places and save people's lives faster.

By Aaron- Third Grade

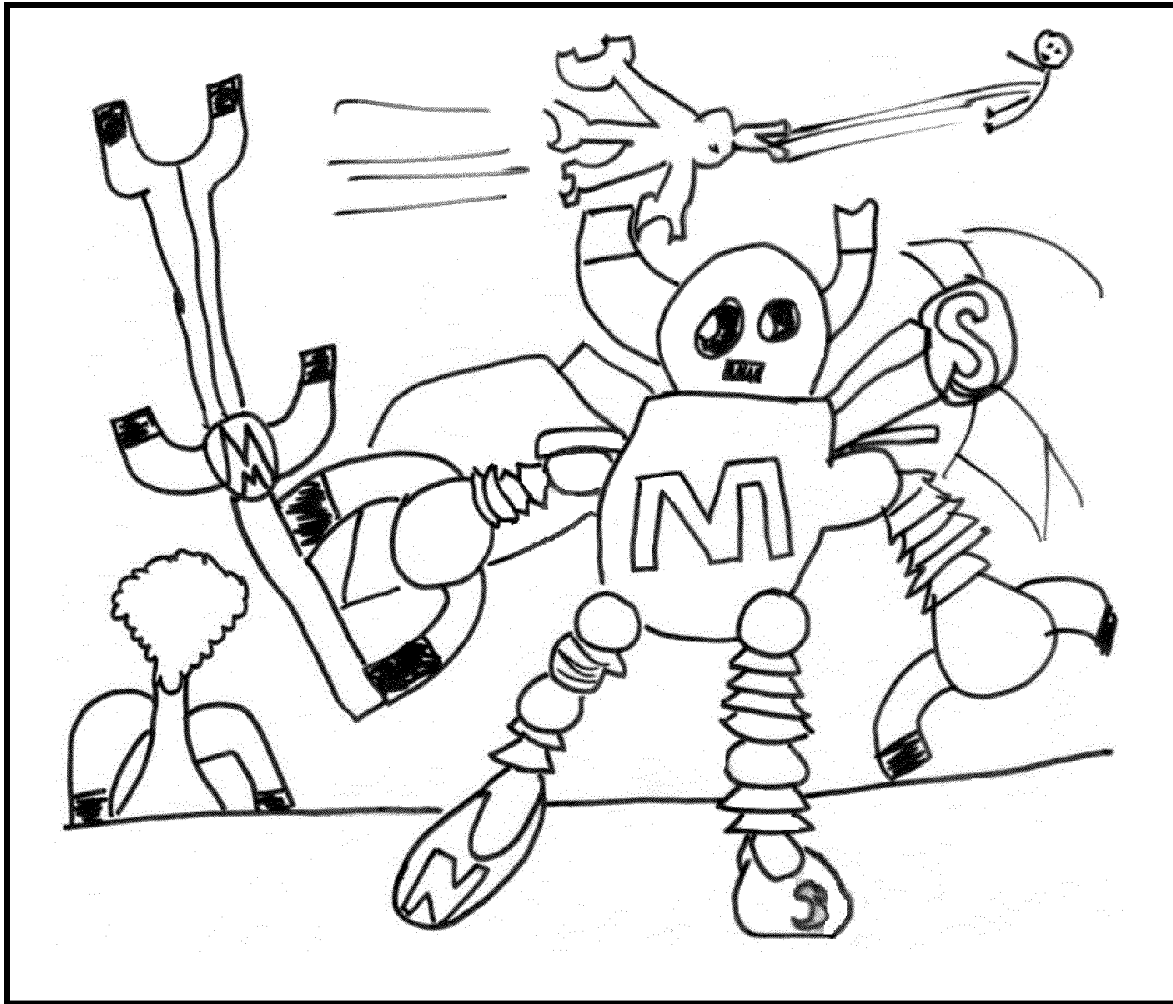
MOE says- The PFA 2000 is a great robot. Real robots generally do work that is dirty, dull, dangerous, or distant. This bot can get into dangerous places and save lives. Now that's a real hero!



Rocket Ride 3000 is my cool robot. It can blast into space to get moon rocks in 1 second and it puts the moon rocks under the barbeque to cook and you have fresh food. It uses its nose to see in the scary dark.

By Santoshi- Second Grade

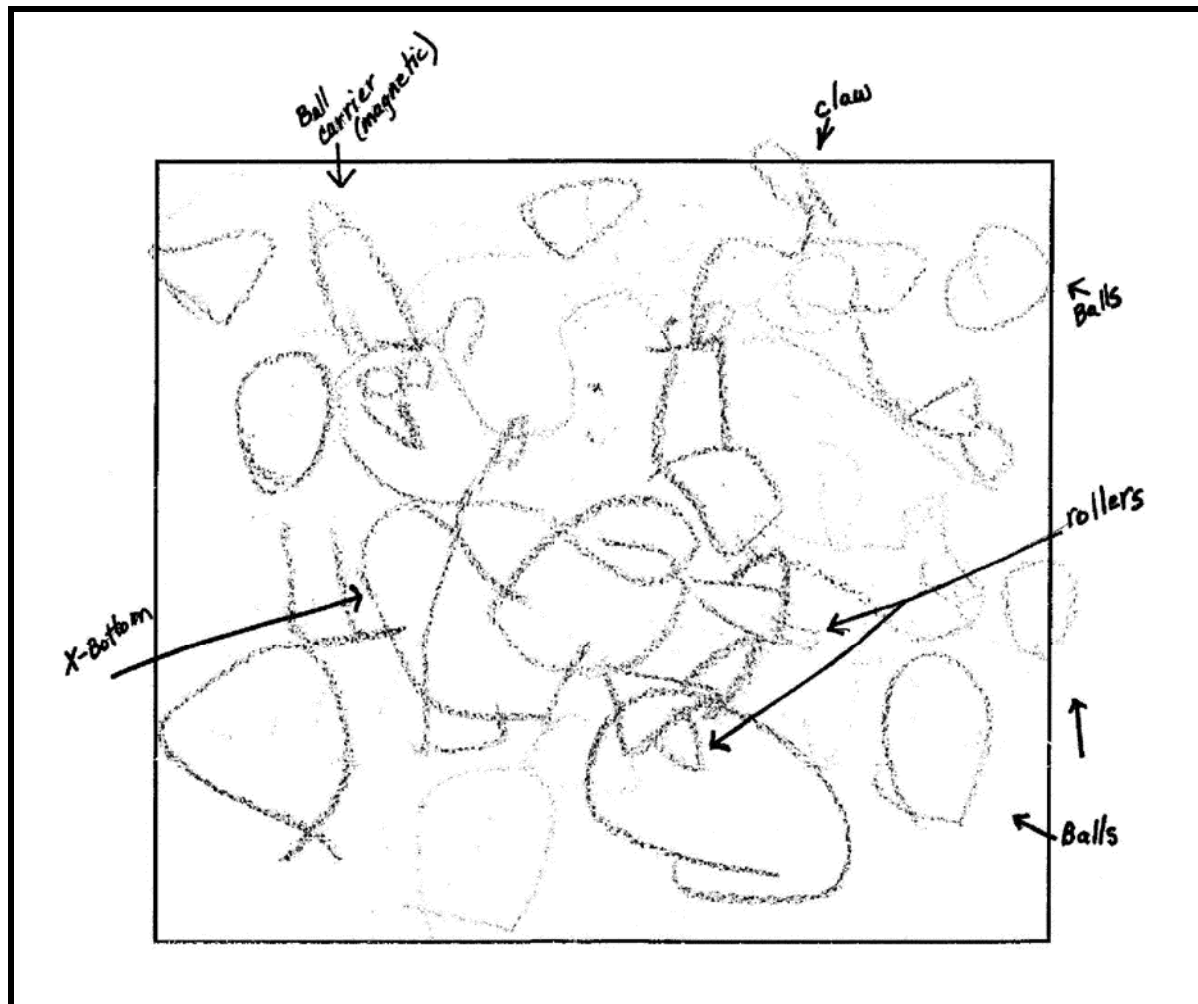
MOE says- We are very excited to see Rocket Ride 3000. It will definitely come in handy when we get to the moon. Preparing fresh food will be very important there. Great idea!



The magnetic warrior robot is my cool robot. It can magnetize you and gravitate you. It uses its magna-sword to gravitate you.

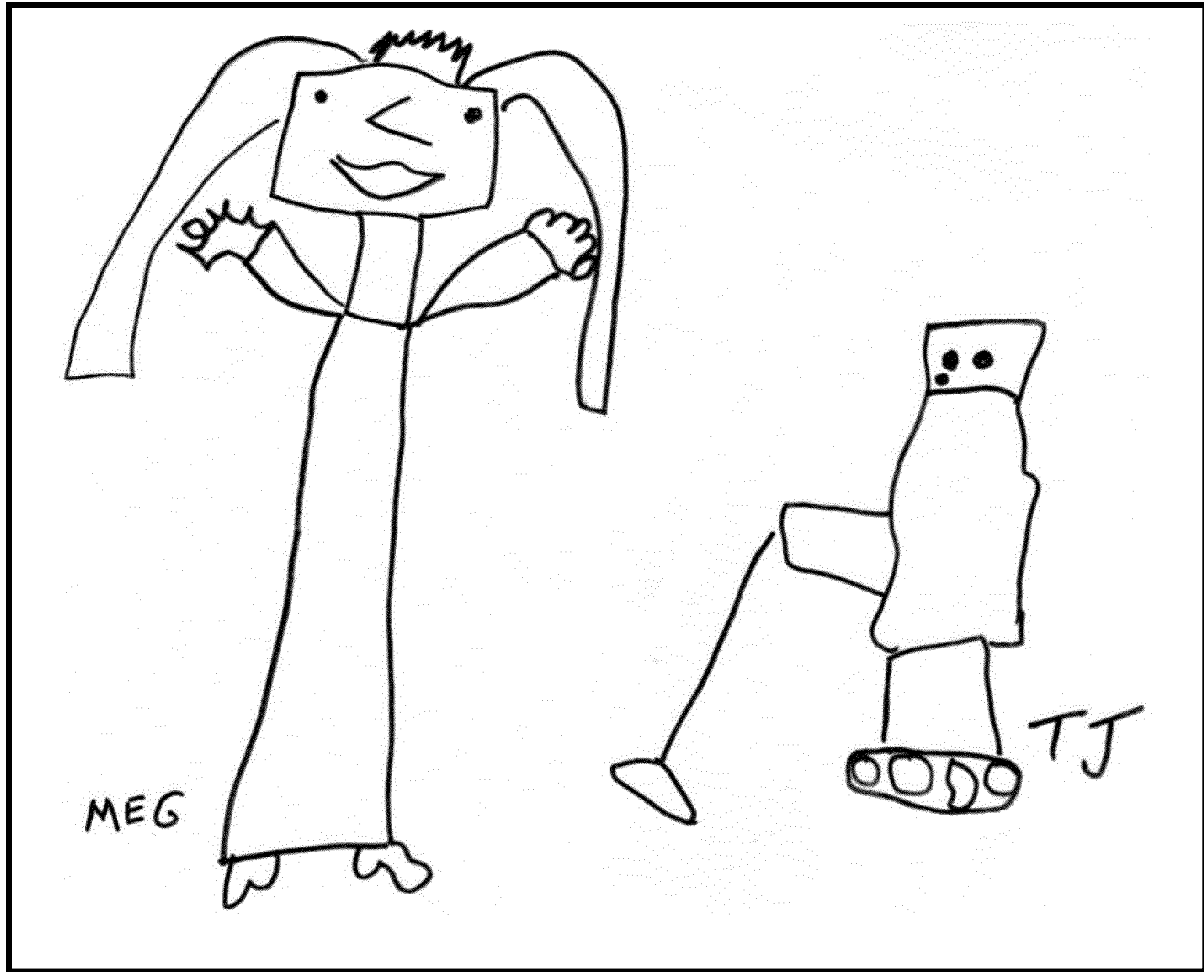
By Qiyam- Second Grade

MOE says- There are really two inventions here- a magnetic warrior robot and its magna-sword. Even its hands and feet are magnetic! This robot reminds us that all new inventions can be used for good or for evil. We hope this warrior robot uses its power for good.



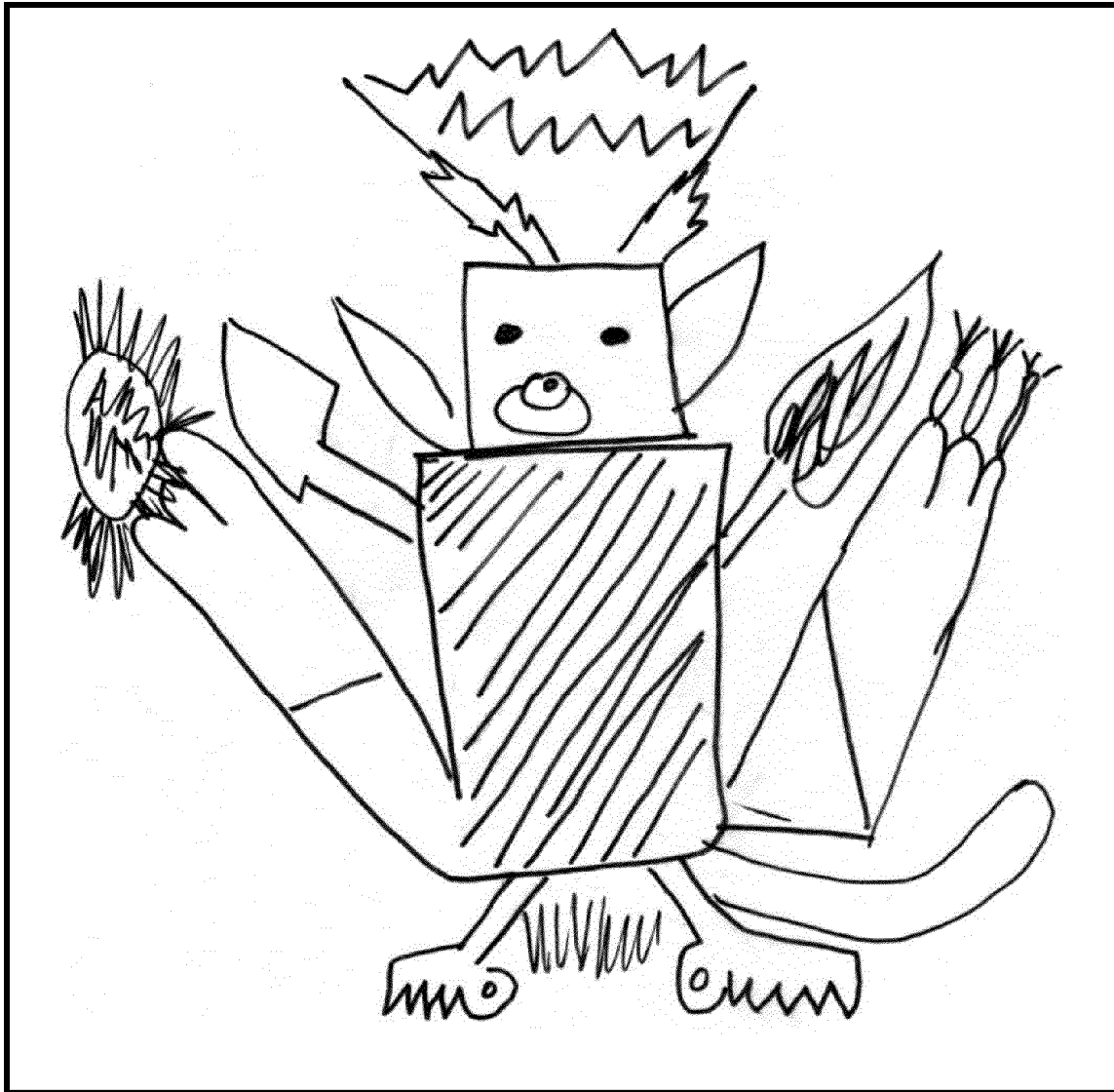
Clean-up Robot is my cool robot. It can roll and pick up. It uses claws to clean up balls. By Alex- PreK

MOE says- We liked Clean-up Robot a lot because we've built ball-collecting robots, too. GizMOE lifted GIANT balls and put them on a goal. Then it would climb stairs and hang from a high bar. TerMOEnator collected foam balls and shot them into a high or a low goal. It used a camera to find the high goal's light. They were good bots, just like Clean-up Robot.



Meg is my cool robot. It can walk. Lucinda- 3 yrs old
TJ is my cool robot. It can vacuum. Shane- PreK

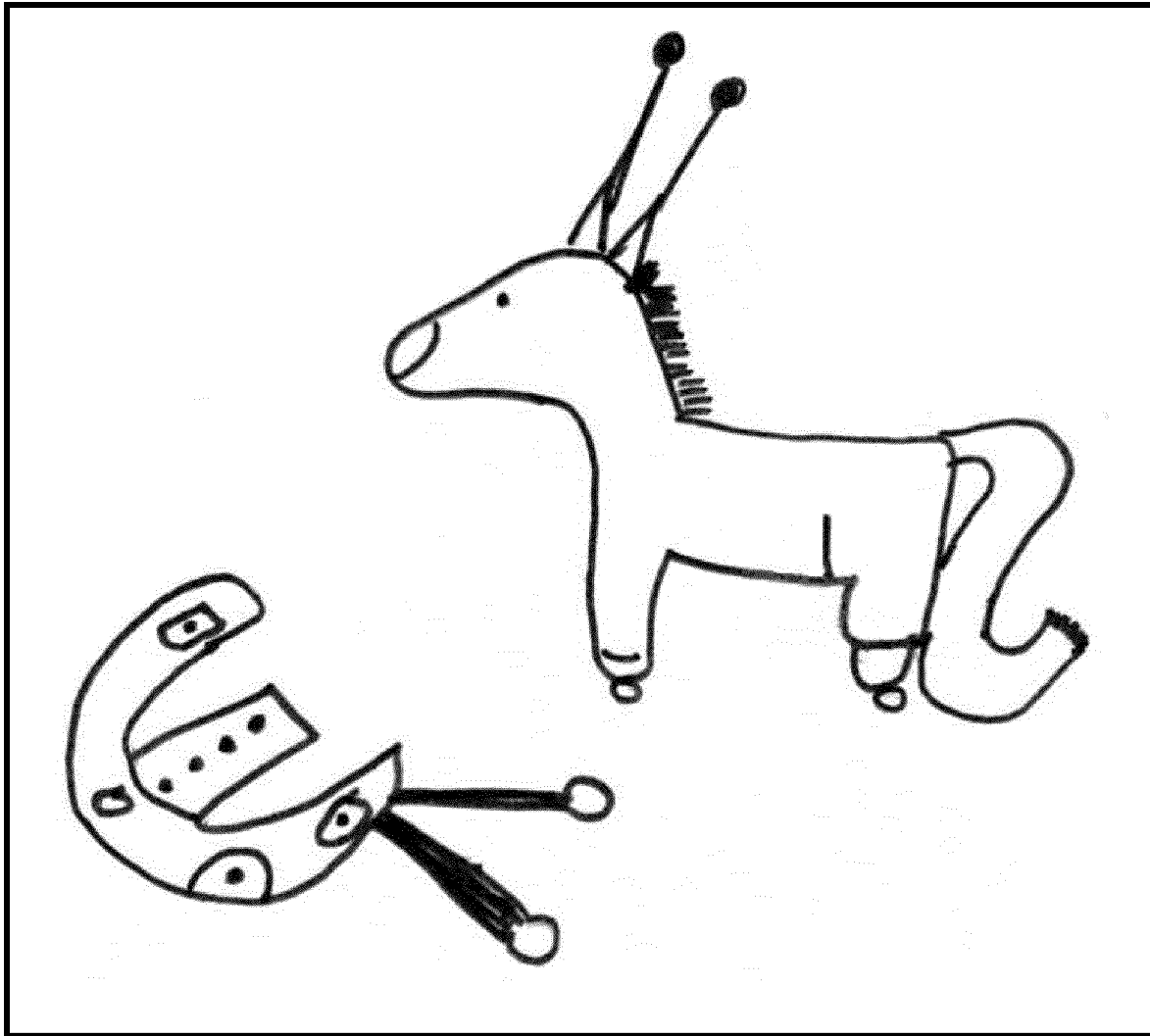
MOE says- We liked these robots because they remind us that sometimes the simplest things are the most important. That is hard to remember sometimes!



Rat Tail is my cool robot. It can shoot bombs and fireballs. It uses rocket power to fly. His feet help climb. His wheels help him go fast.

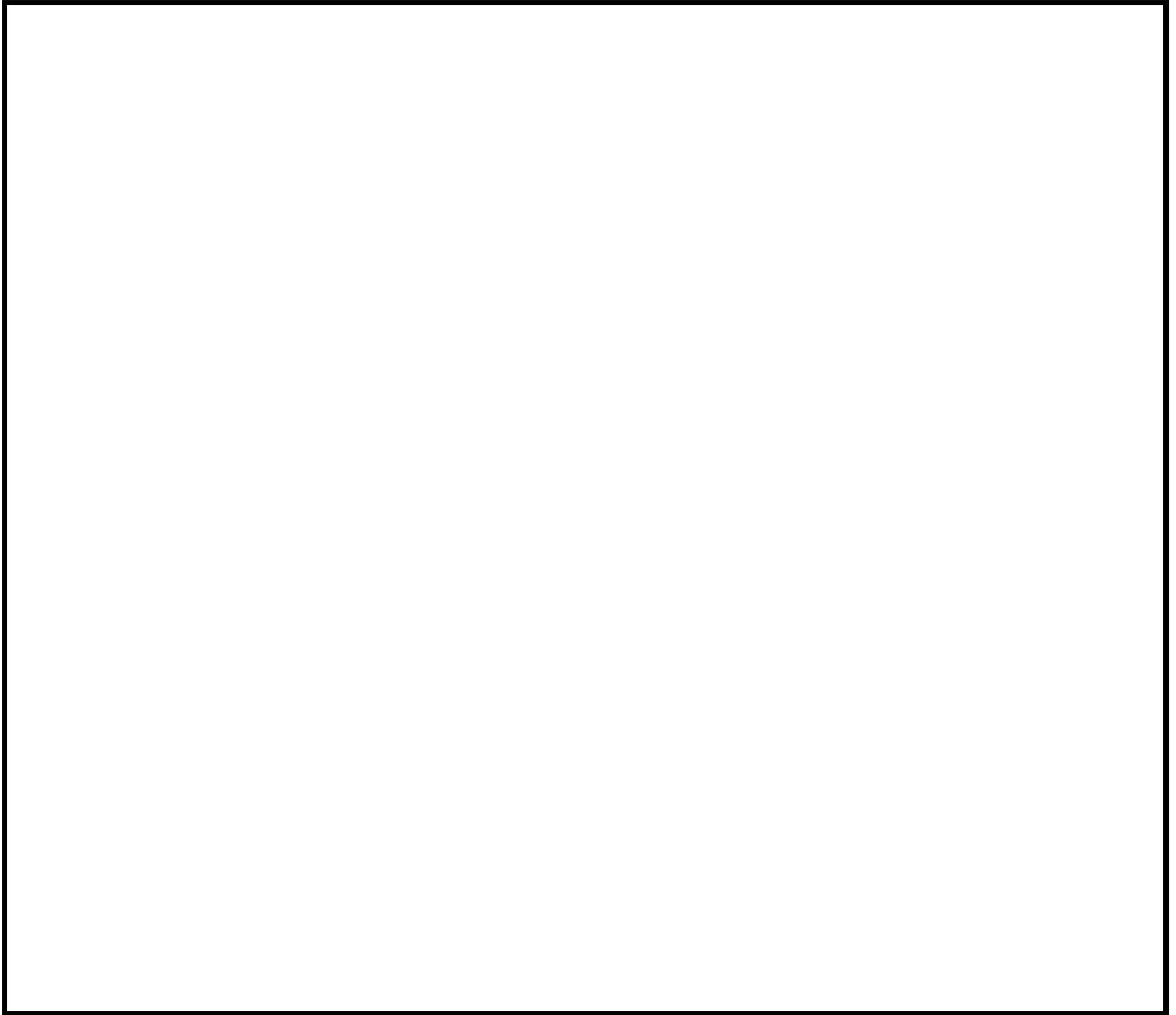
William- Kindergarten

MOE says- Rat Tail is an awesome robot. It climbs, flies, and goes fast. Does its antenna collect information or do they spark electricity to frighten its enemies?



Barbaro Race Horse is my cool robot. It can make you feel happy and help you do school work. It uses rechargeable batteries to speak in English and Spanish and to turn off and on. By Journey- Third Grade

MOE says- Barbaro is a smart robot. It uses language to help people do their work. It has a remote controller and rechargeable batteries, too. Robot designers try to imitate things in nature so that people will like to have them around. This robot designed like a horse shows that idea. It makes you feel happy!



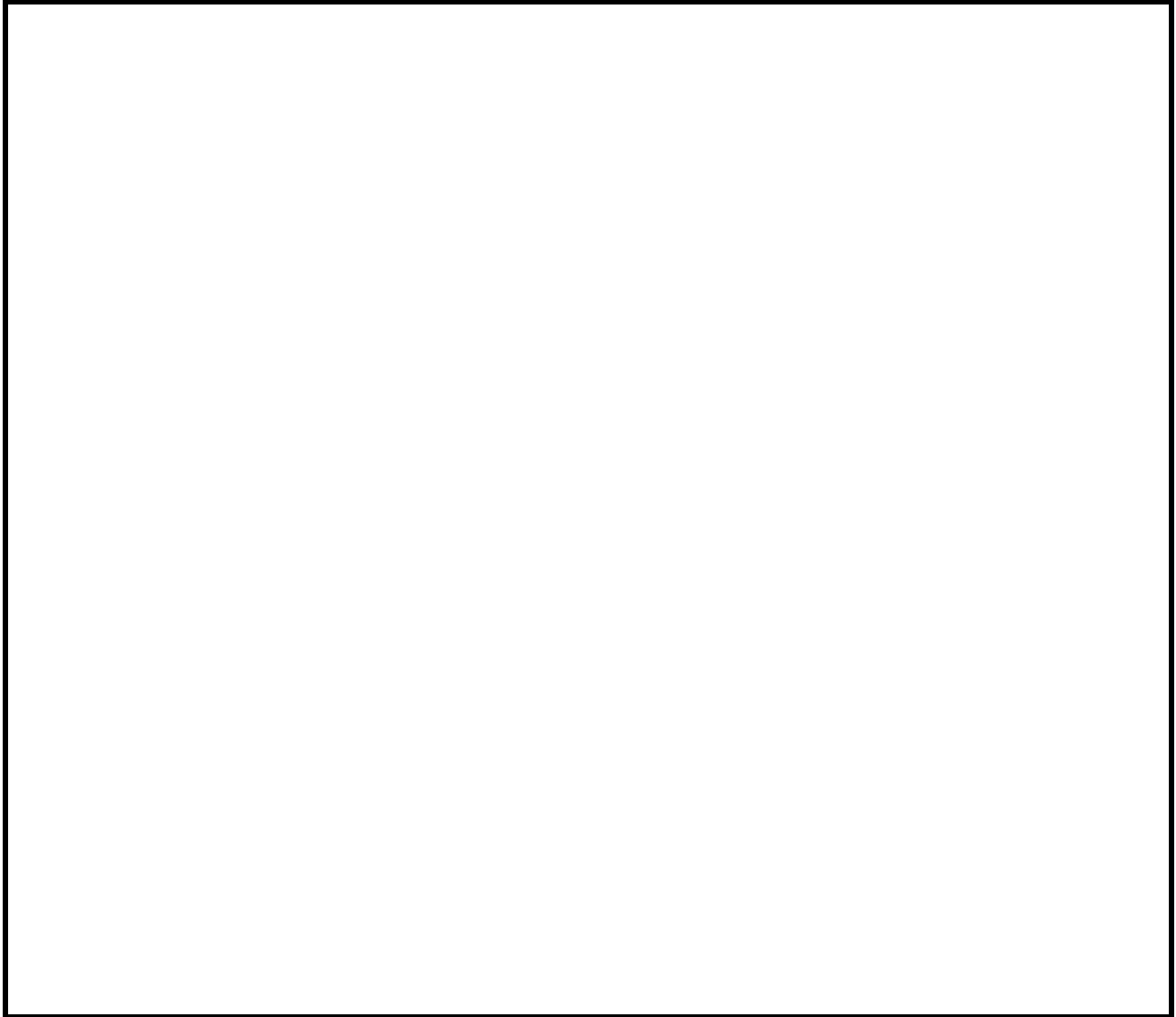
Now it's YOUR TURN to plan and draw a real cool robot. Think of a problem that a robot could help to solve or a job you do not like to do. How will it look and work? What will you name it?

_____ is my cool robot.

It can _____ and

_____. It uses _____

to _____.



Now it's YOUR TURN to plan and draw a real cool robot. Think of a problem that a robot could help to solve or a job you do not like to do. How will it look and work? What will you name it?

_____ is my cool robot.

It can _____ and

_____. It uses _____

to _____.

Learn more about real and imaginary robots at your library and on the internet. Learn more about the scientists, engineers, and inventors who build them.

Here are some books that we like:

For the very young:

- **I'm Building Me a Robot** by Martin Kelly
- **My Little Blue Robot** by Stephen T. Johnson

For grades K-2

- **Spacebusters- The Race to the Moon** by Philip Wilkinson
- **Rockets and Spaceships** by Karen Wallace
- **Rickey Ricotta's Mighty Robot (series)** by Dav Pilkey

For grades 3-4

- **Robots Slither** by Ryan Ann Hunter
- **The Magic School Bus And The Electric Field Trip** by Joanna Cole
- **My Robot Buddy** by Alfred Sote
- **Boing-Boing the Bionic Cat** By Larry L. Hench

For older grades

- **The Adventures of Sojourner: The Mission to Mars that Thrilled the World**
By Susi Trautmann Wunsch
- **100 things you should know about Inventions** By Duncan Brewer
- **Robotics** by Mark Beyer
- **Mighty Robots** by David Jones

On the net

Go to www.moe365.org/more to find some great stories about kids designing and building robots, and to learn more about real cool, real robots.