



Special Recognition List | Grades 4-5

Unique Design/Growth Mindset

Team # 59

Team Name: S.I.S team builders

Norwood Creek Elementary School

Each member of this team was in charge of a set of color-coded strings during device operation, so that everyone could work together. They demonstrated a knowledge of the rules and made adjustments accordingly. The idea they started with developed over time based on iterative testing and brainstorming.

Rigorous Design

Team # 130

Team Name: Innobots

This team proceeded through multiple prototypes with clear purpose and learning at each step. They demonstrated clear effort at each stage of project design, from building to defining roles for demonstration.

Creative Cardboard Construction

Team # 152

Team Name: The PowerPuff Lab

This team demonstrated some really amazing construction skills! The judges were impressed with their creative use of materials and the technical difficulty of what they made.

Embracing and Learning from Failure

Team # 24

Team Name: The Construction Crew

Azevada (Joseph) Elementary School

This team had a special section in their journal discussing their failures and what they learned from each failure. They were clear on what failed, what they took away from the failure, and how they made adjustments to their prototypes based on each failure.

Stream of Consciousness Journal

Team # 273

Team Name: The Techno Tinkers

Blossom Hill Elementary School

The all around joy that was expressed authentically through this team's journal and the entire process and design was amazing! They presented a Journal that truly reflected their journey to a successful device design.

Unique and Innovative Design

Team # 25

Team Name: Milpitas Tech Squad

Mattos (Mabel) Elementary School

This team tried multiple prototypes, and reached the final design by consensus. They showed a high level of team effort. They iterated their design at the Test Trials and even during the Showcase!





The Tech Challenge



Special Recognition List | Grades 4-5 (Cont'd)

Gamification

Team # 40

Team Name: Megabuilders

Azevada (Joseph) Elementary School

The team found a unique way to think about the challenge by building a game to see how cranes could work. They built a web browser game app with a mini module and controls for a crane. They had a lot of different ideas. After originally trying a zip line, they used a pulley system and electronics to control the crane "hands free."

Deep Understanding of Hydraulics

Team # 76

Team Name: Shooting stars

This team demonstrated a deep understanding of hydraulics, including the effect of using air vs water and syringe diameter. They experimented with and solved the problem of air bubbles in the system. They even knew about the use of hydraulics during the gold rush!

Future Engineers

Team # 35

Team Name: Drop Tower

Faria (William) Elementary School

This team was well-spoken, clearly documented an iterative engineering flow, considered multiple approaches, displayed teamwork, and presented

themselves very professionally. The judges could see how each member of the team would be wonderful future engineers! They had a process to quickly calibrate where to place targets during the demonstration. Their execution displayed precision and showed lots of practice.

Powerful Prototypes

Team # 52

Team Name: LiftOff!

Noddin Elementary School

Clearly everyone on this team was excited to come up with new ideas for the challenge. They tested every idea, made small changes, then tested again (solid engineering practice). The team did not get discouraged when they needed to make changes or had problems. It was clear that the team members made these prototypes themselves.





The Tech Challenge



Special Recognition List | Grade 6

Evidence-Based Decisions

Team # 263

Team Name: Lightning Rods

Lawson Middle School

This team took the time to truly evaluate multiple scenarios before beginning to build out a device. The judges also commended them for taking the time to introduce each team member and their interests. They had in-depth reflections and their technical, thorough thinking was evident throughout their entire journal!

Super Scrappy

Team # 7

Team Name: Royal Risers

John Sinnott Elementary, Milpitas

This team used a variety of at-home materials (yardstick, scrap wood, grandma's knitting needle, corks) in their final device. During their interview they also described their table where they evaluated themselves and the design for module attachment/detachment speed.

Brainstorming Brilliance

Team # 15

Team Name: The Soccer Girls

This team included excellent diagrams in their journal (digital and hand-drawn) which detailed the

structural components and functions of their device (rotation, attachment, etc.). They also had clear and organized documentation of what they learned from testing. They had many brainstorming ideas and their journal shows organized documentation of testing and results.

Delightful Documentation/ Safety With Every Step

Team # 160

Team Name: Beam Dream Team

This team kept an extraordinary journal! Drawings, notes, comics, teamwork, collaboration and notes on safety throughout.

Crane Enthusiasts

Team # 241

Team Name: Indestructible housing
Hopkins William Middle School

This team incorporated research about cranes into their project in a way that led to a successful device. The team took the challenge very seriously and covered safety in a very thorough way. They hit every mark on their journal. The judges learned a lot about various types of cranes!





The Tech Challenge



Special Recognition List | Grade 6 (Cont'd)

Innovative Spirit

Team # 423

Team Name: Area 51's best employees
Steindorf STEAM Magnet School

It was impressive to see the innovative way this team researched the problem to get a better understanding and inform their prototyping and building process. They visited construction sites and modular housing builders. That is unique and impressive! Great job working as a team and reflecting on learnings as well.

Technical Wizards

Team # 182

Team Name: The Bananas

This team used templates to place the targets and had an elaborate pulley system. They collaborated by all helping the person with the controls to adjust the angle of the module so it made it into the target.

Strategic Success

Team # 256

Team Name: Swift Shifters

This team had strong teamwork and integrated multiple prototypes into a testable and stable device that they clearly documented. Their well

organized meeting and development strategy is clearly outlined in their Journal. During the demonstration the team worked together from both sides of the rig for perfect placement! They used micro-movement coordination. They also had strong team spirit and engagement.

Justification Jedis

Team # 67

Team Name: Dream Steam

This team included very thorough descriptions of their design rationale, including explanations of what they learned from each build and test, and justifications for each structural and functional component of their final design. They had a well compiled Journal!

Super Communicators

Team # 269

Team Name: Tech Legends

52 seconds left! This team was clear on communication during their demonstration. They indicated when it was safe to move and when each teammate was ready. They were supportive, clear with directions, and encouraging to each other!





The Tech Challenge



Special Recognition List | Grades 7-8

Planning & Documentation

Team # 42

This team put a lot of planning into their work,. When they met they discussed and solved together. Their journal was well documented with notes for each meeting with problems to discuss and what was discussed in the meeting. They designed a device they could operate, with all 4 team members participating, even the person in the safety zone.

Love of Engineering

Team # 135

Team Name: Build it Bobs
Cabrillo Middle School

This team had so many prototypes! Their journal included many detailed drawings, consideration of design impact on the environment, and extensive testing.

Cut Twice, Measure Once

Team # 288

Team Name: 4 Guys

This team worked very smoothly to complete The Challenge with an interesting and well engineered device. During the demonstration they spent 1.5 mins measuring and validating target placement, but then nailed all transfers on the first try!

Engineering Gurus

Team # 120

Team Name: Nuts and Bolts
Centerville Jr High

This team worked together with everyone contributing their own skills. They went above and beyond and ended up using AI in an innovative way. They were recognized during their device demonstration as well for a fast and effective device. The clamping they had gave them control over the process.

Persistence

Team # 210

This team did not give up. When something went wrong in Test Trials or even at the Showcase they stayed calm, worked through the problem and finished the process. Their perseverance paid off even though things didn't go as planned.

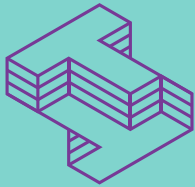
Journal, Organization, & Artistic Talent

Team # 245

Team Name: Skyline
Steindorf STEAM Magnet School

This team had a visually appealing, organized, and creative journal. The team painted the device a uniform color and coordinated their costume with the device color. They painted the team name on the device and painted a clever motto at different locations on the device with on brand contrasting





Special Recognition List | Grades 7-8 (Cont'd)

colors. They really thought through the artistic elements of their design.

Collaborative Engineering

Team # 257

Team Name: Team Built Different (TBD)

This team had clear tasks and responsibilities tracked and noted for each member of the team. During the journal, testing, and demonstration they had enthusiasm and collaboration as team members all took on many tasks. They even thought about how to make sure that their design could be used in areas that might be under-resourced communities. The team worked flawlessly together to complete every transfer on their 1st attempt. They had over 3 mins left!

Outstanding Journal & Use of 3D

Rendering/Printing

Team # 204

Team Name: Error #204 Crane Not Found

Tessellations School

This beautifully presented Journal included visuals of their 3D printing technology used in an insightful way. From reflections that embody the spirit of the challenge to excellent teamwork, this Journal was an exemplary example of a team telling their story. The team created a 3D printed solution to control the module from swinging

which was remote controlled. It was the result of 1000s of iterations.

Fun/Humor and Challenging

Themselves

Team # 276

Team Name: Need a Lift?

Tessellations School

This team clearly enjoyed themselves and made use of humor throughout. Also, they chose to challenge themselves at the beginning by choosing a design which would be harder, but from which they would learn more.

Testing Queens

Team # 28

Team Name: Skybound Squad

Rolling Hills Middle School

This team showed excellence through documenting their testing/prototyping process and overcoming trial and error while also having fun as a team. With 9 different prototypes and 15 meetings, this team was dedicated to creating a final device that they were proud of inspired by real-life examples. They wanted to build something sustainable so they constructed materials in a way that the device could be pulled apart so materials could be reused for future projects.





Special Recognition List | Grades 9-12

Crane Enthusiasts

Team # 242

Team Name: East Side Innovators

This group incorporated research about cranes into their project in a way that led to a successful device. This team took the challenge very seriously and hit every mark on their journal. The journal judges learned a lot about various types of cranes! They covered safety in a very thorough way.

Innovation Story Tellers

Team # 378

Team Name: Technoblade

This team clearly documented all iterations of their design. They even had a summary table in their journal comparing their iterations.

Embracing Failure

Team # 58

Team Name: Caution Tape

Evergreen Valley High School

Documenting failures and learning from them is an important part of engineering. By clearly describing what happened, how they felt, what they tried next, and what they learned from the failure, this team embraced their failures to excel. They also received special recognition on Device Demonstration for having an elegant design for a

remote controlled device. It was clear this team planned, coordinated, practiced and tested their design.

Testing Champions

Team # 86

Team Name: Bob the Builders

Santa Clara High School

Every time this group tested a prototype they did multiple trials and documented what occurred at each trial and how long it took.

Social Spirit of the Challenge

Team # 304

Team Name: Paper Cranes

Santa Clara High School

The message that this challenge was about housing solutions and not just engineering, was not lost on this group. They addressed the housing concerns of overcrowding and high housing prices in San Jose as the driving force in their research and design.

How-To Heroes

Team # 264

Team Name: ACES^2

This group provided detailed instructions on how to build their device. They included step by step





The Tech Challenge



Special Recognition List | Grades 9-12 (Cont'd)

instructions, a detailed materials list, and diagrams. The journal judges noted it was one of the few devices they would feel confident building themselves from the instructions! This is the team's 7th year at The Tech Challenge and they also demonstrated amazing teamwork and positive team spirit!

Data Driven Decisions

Team # 357
Team Name: Crane-iacs
Santa Clara High School

This team iterated through many engineering ideas, especially for lifting mechanisms and the claw design. They noted their journey, how they learned through it, and made changes to their design. They could clearly answer questions and explain their reasoning. They tested extensively for each design before coming up with the final model.

Embracing The Challenge

Team # 4
Team Name: Sonic Bloom
Homestead High School

This team had excellent diagrams. They included both written and digital diagrams of different components that they tested and revised. This team challenged themselves to come up with multiple solutions at different ends of the spectrum. They tried minimalist solutions and

more complex solutions. During the device demonstration they had incredibly smooth communication and operation. They focused on challenging themselves, not worrying about the competition. They've truly embraced The Tech Challenge!

Experimentation and Editing

Team # 50
Team Name: Bob the Builders
Washington High School

This team did extensive work characterizing the hydraulic system and arrived at a method that would be real world applicable. In other less critical areas, they used simple solutions like friction slides and pipes. They had a well tailored focus to the critical elements of the design. The judges noted they built a complete hydraulic system for their primary mechanism using syringes.

Unique Design

Team # 305
Team Name: The Cranes
Santa Clara High School

This team went out of their way to go out of their comfort zone and use hydraulics in order to learn more about it despite being unfamiliar with the concept. They had an effective design that worked but was new to them.

