

THE RIVETERS



TEAM

1481

2018 BUSINESS PLAN

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EXECUTIVE SUMMARY

TEAM MISSION STATEMENT

To inspire students at Mercy High School in science, technology, engineering and math (STEM). Through a FIRST Robotics program, we encourage young women to choose STEM career paths. We promote learning through a mentor-guided and student-led effort to design, build, program a robot and manage a competitive team.



The Riveters with their first Blue Banner at Woodhaven, 2017

HISTORY

Team 1481 was initially established in 2004 at North Farmington High School. The team disbanded in 2007, and in 2014 Team 1481 was reestablished and rebranded as the Riveters at Mercy High School. A small group of experienced mentors in Farmington Hills, including mentors previously affiliated with 1481, wanted to bring the FIRST Robotics experience to an underserved population. The mentors worked closely with FIRST in Michigan and connected with Mercy High School, an all-girl Catholic school. This affiliation provided a unique opportunity to introduce STEM to young women in a school that was yet to adopt the program. Team 1481 was resurrected and The Riveters were born.

Through the hard work of our students and mentors and the support of our sponsors and administration, The Riveters expanded from a small group of students trying to salvage Team 1481 into one of Mercy's largest and most successful teams. We started with low funding and limited workspace, but through our team growth and success, we managed to develop our own workspace for all functions of our team, procure more sponsors, and increase student participation by 18% in the past year. We worked through our three competition seasons to prove ourselves as a viable FIRST competitor at the regional, state, and national level, and we hope to continue our prosperity this competition season

TEAM NAME

The team voted to be called The Riveters because it was the most appropriate name. Rosie the Riveter is an iconic WWII symbol of female empowerment; she represents the hard-working women who took on the jobs of men who went to war. Mercy High School was established in 1945, at the end of WWII, and the phrase "female empowerment" is exhibited in its classrooms.

Rosie symbolizes skill building and service to our country, ideals that mirror the purposes of Mercy High School. For all these reasons, the team adopted Rosie's slogan, "We can do it!" Rosie represents who we are as women in STEM and who we strive to be.



TEAM GOALS

Last year The Riveters competed at the Southfield District Competition and the Woodhaven District Competition, where we won the Entrepreneurship Award. The Riveters then moved on to compete at the State Championship at Saginaw Valley State University and won the State Imagery Award while also qualifying to go to the FIRST Championship in St. Louis, MO for the second time. We hope to continue our award winning streak.

2017-2018 GOALS:

- To have a fully functioning robot for competition
- To train student leaders how to train incoming students
- To win Engineering Inspiration at Regionals
- To win the State Imagery Award
- To qualify for and attend Worlds

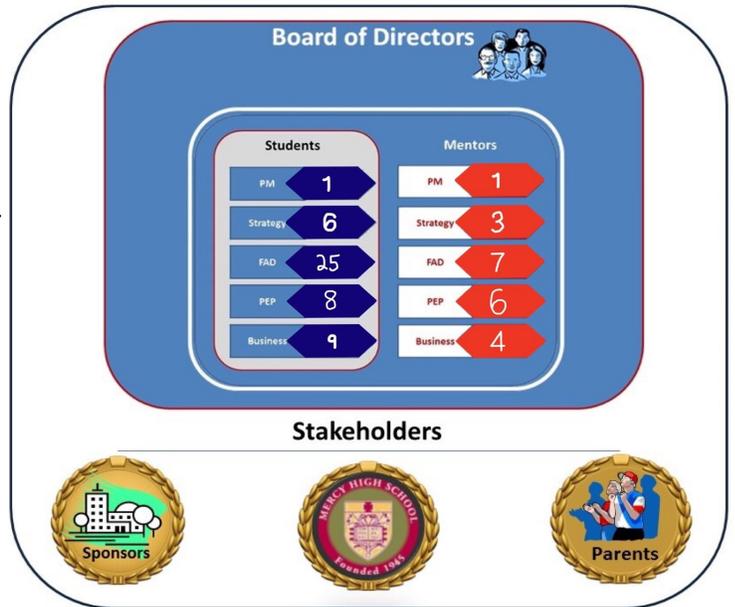
ORGANIZATIONAL STRUCTURE

BOARD OF DIRECTORS

A board of directors consisting of parents, mentors, and Mercy administration oversees the team. The board sets and administers the budget, and the books are audited annually. The board of directors took on the job this year of creating our team as a non-profit now known as Riveter Robotics. Our Board is a support system for our students, they give us critical guidance regarding the logistics and functions of our team.

SUBTEAMS

Team 1481 is organized into 5 groups: Project Management, Strategy and Drive, Business and Development, Fabrication Assembly and Design, and Programming, Electronics, and Pneumatics. This year the team also uses what we call “swim lanes,” which are student-led groups of six students and two mentors. Each swim lane works on a specific component of the robot from design to fabrication to programming. Swim lanes keep students focused and allow the entire FAD subteam to share space in the workshop.



Scouting is part of our Strategy subteam.

FAD

FAD stands for Fabrication, Assembly and Design and is composed of Mechanical and CAD students who work together to create the robot. The team Safety Captain and pit staff are also part of FAD, even though they may have roles in other subteams. CAD generates full 3D renderings of all aspects of the robot in Autodesk Inventor, giving the Mechanical group an understanding of what they need to fabricate.

SAD

The Strategy and Drive (SAD) subteam formulates a well-thought-out game plan and requirements for the robot design. The SAD leader works closely with FAD and PEP to make sure that the robot will achieve the team’s goals and be competitive. During the build season, SAD holds tryouts and interviews to choose the Drive team members. After being carefully chosen, the Drive team will practice with the test robot, allowing them to become familiar with the game and how to play it. During competitions, Strategy focuses on scouting. Scouts will interview teams in the pits and record their performances during competitions.



PEP

The PEP subteam is responsible for the Programming, Electronics, and Pneumatics systems of the robot. Each programmer is assigned to a function of the robot so that they can work with their code throughout the season and develop it. To code, PEP team uses LabView, which is a graphics-based programming language. PEP also designs and builds the electrical board and determines the sensors which will be needed for the robot. When pneumatics are used, the PEP subteam works to plumb, wire, and program that system as well.



PEP consults their mentor to help fix a coding issue.



BAD girls pop rivets too!

BAD

Business and Development (BAD), is in charge of procuring sponsors, team branding and imagery, developing the business plan, and outreach. Spirit wear design, team logos and uniforms, and the team website are all developed by BAD.

This season, BAD hopes to help the team win the Entrepreneurship Award and the Engineering Inspiration Award. For our team imagery, we focus on our iconic uniform design, team logos, pit design, and our website. Engineering Inspiration involves our business plan and documenting our engineering process and outreach events.

PROJECT MANAGEMENT

Project Management (PM) is the control center of the team, driving the Riveters' schedule, goals, and budget. PM keeps the team on budget by developing our Cost Accounting Worksheet. The PM keeps track of the team's activities by using a Gantt Chart, and our operations follow the System Engineering V. These two resources are developed by the PM in collaboration with other subteams, and are crucial to aligning team activities with our specific goals.



Our project manager leads our weekly team meeting.

SPONSORS

Sponsors support our team by providing money, supplies, services and mentors. We have five tiers of sponsorships with additional benefits depending on the amount of support a sponsor offers. All of our sponsors' logos appear on our team website and banner. For "Silver" level and above, a sponsor's logo is displayed on the back of our uniform and on our pit at competitions. Some higher tier benefits include a larger size logo on the banner, uniforms and robot, sponsor visits to the team workshop, attending our end-of-season banquet and featuring our robot at a company event

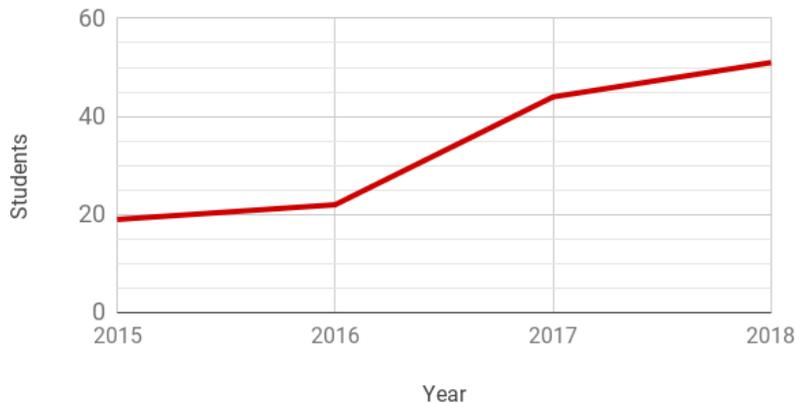
MERCY HIGH SCHOOL

Mercy High School is expanding their STEM based curriculum for the upcoming 2018-2019 school year. Implemented for the first time in the 2017 school year, Mercy's STEM program included only one course, Introduction to Coding. Over 40 students registered to learn Java programming in this new class. With a surprising number of Mercy students interested in STEM, The Riveters' administrative liaison encouraged Mercy to give students more opportunities to explore the field. New course offerings include Introduction to Engineering and Computer Science, offered through a dual enrollment program with Lawrence Tech and will earn students one college credit upon completion. Team 1481's goal of bringing STEM to Mercy classrooms will further our mission of inspiring young women in engineering, especially in our own halls.

TEAM MEMBERSHIP AND GROWTH

Recruitment was an important focus for our team this year as we prepare to lose our experienced senior students. The Riveters increased student membership 18% from 43 student participants in the 2017 competition season to 51 this year. Exponential growth became a concern for the team last year, but we managed to maintain a student-to-mentor ratio of 2:1, allowing us to continue our hands-on training approach. Our resources have also expanded along with team numbers. We formed partnerships with three additional sponsors, including The Energy Alliance: Consumers Power and DTE, Carhartt and Magna International, we were also able to purchase a new Velox CNC machine. With increased space and sponsors, and maintaining our mentor ratio, we are able to support our growing team.

Team Members and Growth



RELATIONSHIPS

STUDENTS AND MENTORS

The students and mentors meet year-round, and come together for team lunches and dinners provided by the parents. Spending social time together provides mentors a chance to connect with students and other mentors. The Riveters use TeamSnap as a primary source of communications, announcements, and documentation. We use Google Docs to annotate documents which we use throughout the season. To track attendance, students and mentors must check their availability on TeamSnap, to record data and eligibility for competitions and a varsity letter.

Other than the team meeting every Saturday, individual subteams meet different days throughout the school week, to work on their skill improvement.

For fun, we have quote boards where comedic sayings and pictures from the students and mentors are posted. This tradition keeps everyone entertained during our stressful build season. Mercy High School provides us with teacher liaisons, public recognition, and space for the team shop and meetings.

SPONSORS

Our sponsors are important to us and our goal is to represent their brands well by conducting ourselves in the true spirit of FIRST. Each fall we hold a letter-writing campaign to identify and solicit potential sponsors and send a renewal letter to existing sponsors with a framed photo of the team. We invite local sponsors to watch our robot compete and encourage each sponsor to participate, not just donate money. This year we have tried to form sponsor relationships through more personal connections, which included giving student presentations to Autodesk and Novelis.

From our sponsors, The Riveters seek four essential elements for our team: money, materials, services, and mentors. This year, two of our sponsors, Metro Bolt and Fastener and Novelis Inc., have donated fasteners and aluminum respectively. Our three newest sponsors this year are The Energy Alliance: Consumers Power and DTE, Carhartt and Magna International. Carhartt provided this year's team uniforms at a discounted price and The Energy Alliance awarded our team a \$10,000 grant in the mid-2017 season. By connecting sponsors to the team as closely as possible, we hope they will stay engaged with us for the long term.

We believe a sustainable team creates an environment that attracts and engages students, mentors, and sponsors. With our team members, our mentors, and our sponsors helping Team 1481 thrive, we have become like a second family.



OUTREACH

INSPIRING OTHERS

We inspire others to become a part of our team through our annual recruiting events, “Chocolate and Robots,” a Riveters fall open house for potential team members, and RoboGirls, a Mercy High School recruiting event hosted by The Riveters. RoboGirls is a one-day challenge for middle school girls to design, build and program Lego Mind Storm kits, to expand their awareness of STEM and robotics.

We also participate in Mercy events such as their annual open house. Now that the team is housed in Mercy, we are more accessible to students who are interested in participating in FIRST. Mercy is a familiar welcoming space, almost like a second home, so meeting at Mercy helps team members have a positive experience.

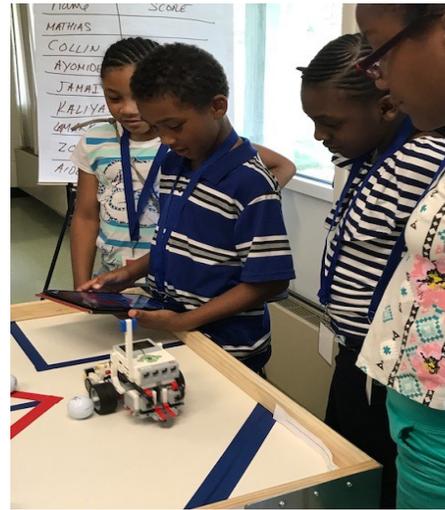


Entertaining the littlest Rosies at Rosie World Record day.

ENGAGING THE COMMUNITY

Last fall, one of our members traveled internationally to the Community for Learning, a high school in the capital of the Dominican Republic, to explain FIRST Robotics and to encourage the school to start a team of their own.

In Michigan, our team attended the Rosie the Riveter World Record, at Eastern Michigan University. Our team impacted around 4,000 people who were interested in learning about FIRST Robotics. Another large-impact event was our participation in the Chevrolet booth at the North American International Auto Show, displaying an autonomous robot. Combined with other FIRST teams, we impacted hundreds of thousands of people, hopefully sparking interest in FIRST within children.



RoboKids from St. Vincent & Sarah Fisher

Within the Metro-Detroit community, our team hosted RoboKids, a field trip for at-risk children from the St. Vincent and Sarah Fisher Center, to experience hands-on activities which give a basic understanding of each sub-team. We also participated in the Bloomfield Girls Robotics Competition, which supported young women in STEM and how crucial they are for a team's success.

Team 1481 uses social media to publicize our outreach events. We also use social media to post team updates, pictures and acknowledge current sponsors. By posting on our Facebook, Twitter, and Instagram, we can show possible new students, mentors and sponsors our achievements and our team. If anyone wants to learn more about our team they can find us at these sites:

- Facebook: [FRC-1481-The-Riveters](#)
- Twitter: [@1481theRiveters](#)
- Instagram: [frcl481_the_riveters](#)
- Website: [1481riveters.com](#)



Auto Show 2018

FUTURE PLANS

SHORT TERM PLANS

We have a high mentor-to-student ratio to support the team, giving each student more time to learn skills and creating camaraderie. All school year we have weekly meetings, extra meetings during build season and additional training sessions for new students during the summer.

BUILD SEASON

Before kickoff, the project manager creates our Gantt Chart to keep the robot building activities on schedule. During the first three weeks of the build season, our team focuses on the strategy of playing the game, building field elements, brainstorming and designing our robot, fabricating the chassis, programming, and wiring the electronics board. Weeks 4-6 are spent working on components by FAD, while PEP installs their components. After bag day, weeks 7-8 are spent building a duplicate robot to debug and to drive, so the team is ready to compete.

COMPETITION SEASON

After bag day, all subteams work together to tweak programming, build our second robot, and strategize. Throughout competition season, the drive team focuses on competing on the field while other subteams support in the pit. The rest of our team focuses on imagery and scouting other teams in preparation for building alliances in the finals. Our team is very noticeable during competitions in our iconic polka-dot and denim look, and we make sure to design and customize our robot, uniforms, and pit to embrace Rosie's polka-dots.

SUMMER

After the busy competition season, the students elect their new subteam leaders. During the off season, we train our new student leaders, build skills and attend The Big Bang competition in Taylor, MI to train new drivers. We continue community outreach to inspire young women to explore a career in STEM.

FALL

In the fall, The Riveters welcome new students at Mercy's club expo and introduce them to FIRST Robotics as an extracurricular activity. We also invite students to our main recruiting event, Chocolate and Robots. A chocolate fountain and a variety of treats attract potential members, but students also tour each subteam to gain a hands-on experience of The Riveters in action. In October new members are trained in their area of interest at our weekly meetings. The team attends the Bloomfield Girls Competition in November to give new students an introduction to FIRST competition, while experienced students have an opportunity to engage with children and young women like ourselves interested in STEM. In the remaining time before kickoff, our team continues training to prepare for building and programming a successful robot. Our ultimate goal is to go to the World Championship, so we also talk about how we will accomplish this goal.

LONG TERM PLANS

We hope to participate in, and host, more community outreach events such as summer competitions and women in STEM events. To bring the FIRST message to youth in our community, we plan to start FLL teams in the near future, specifically at parochial elementary and middle schools. We also want to be recognized in the community for our sponsors, students, mentors, and competition wins.

With a potential threat of losing a sponsor, we plan to form stronger relationships with our existing sponsors and branching out to other companies interested in supporting our team. We will also continue developing our methods of finding and forming partnerships with potential sponsors.



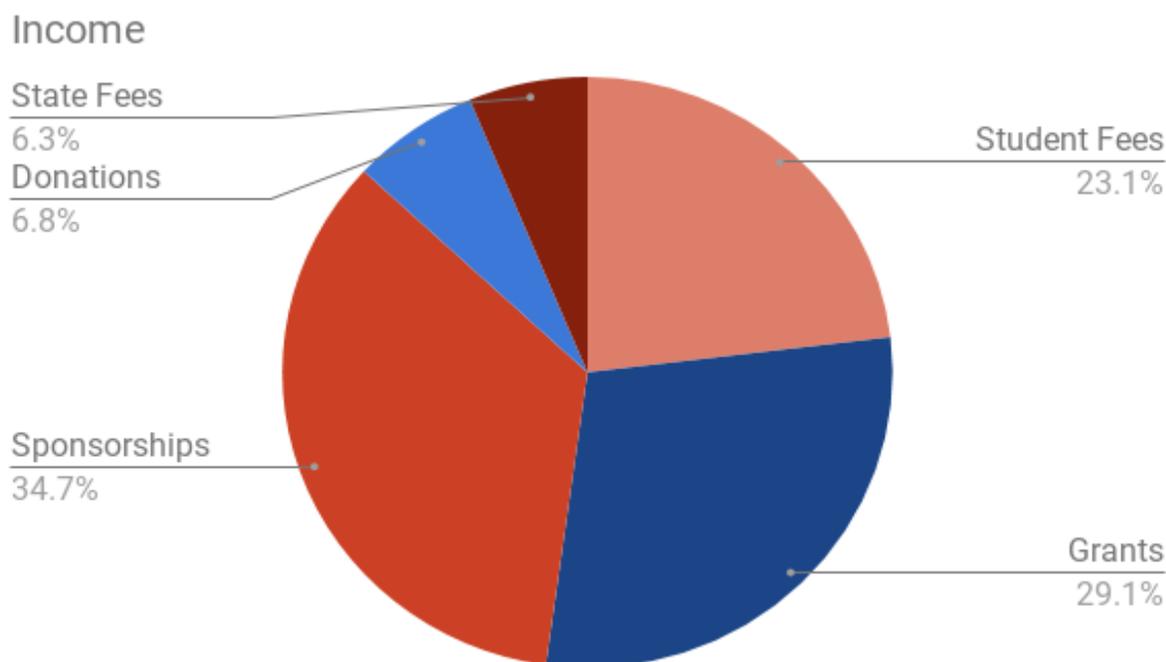
FAD builds the intake mechanism for our 2018 bot.

STRATEGIC PLAN

SUSTAINABILITY

The Riveters' plan for team growth includes outreach to younger students. In 2016 one of our team members created a FIRST Lego League team, The Robopanzers, at St. Paul's Lutheran School in Northville, MI. This FLL team was our team's first attempt at a long-term outreach program that would promote FIRST Robotics as well as serve as a recruiting opportunity for Mercy High School and The Riveters. Sadly, in 2017 the team was put on hold when St. Paul's hired a new principal who did not feel that she could support an FLL team in her first year on the job.

As a robotics team at an all female school, The Riveters attract many parents and other members of the community who want to mentor young women exploring engineering. The team has a high mentor-to-student ratio.



The money our team receives comes mainly from student fees, grants and sponsorships. The goal each season is to find sponsors who are looking to promote STEM careers for women.

In order to develop ideal sponsors, our team goes through a series of tasks to find, communicate with, retain, and develop a relationship with these sponsors throughout the upcoming seasons. Our business subteam students, research potential sponsors within the Metro Detroit community and contact them by letter. If any of these companies express interest in becoming a sponsor, students will follow up with a phone call and later an in-person presentation.

The team retains a long-term relationship with sponsors to prevent turnover, and communicates regularly with them to ensure their sponsorship.

Last season, our biggest threat was exponential growth, which led mentors to make an effort to train students before build season, so students have more experience building a robot. Mentor training before the build season requires experienced mentors to demonstrate engineering skills, FIRST principles, and how to promote student leadership to the newly recruited mentors.

SWOT TABLE

<p>Strengths</p> <ul style="list-style-type: none"> • Time to train and mentor our girls • Good number of team members • Qualified mentors • STEM classes offered at Mercy • Opportunity to earn a varsity letter 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Loss of team members when they graduate • Loss of parent-mentors when their children leave the team • Drop in numbers during build season
<p>Opportunities</p> <ul style="list-style-type: none"> • Scholarships • New mentors • Engineering activities • Robot simulations • Expand facilities for CAD and business • Swim lanes to engage more students more deeply and more consistently throughout the build season. 	<p>Threats</p> <ul style="list-style-type: none"> • Loss of sponsors • Lack of highly skilled mentors • Conflicting sports/clubs • Equipment breakdowns

RISK MITIGATION PLAN

By analyzing our organizational structure, we found five areas that are crucial to a functioning team: students, mentors, sponsors, space, and equipment.

STUDENTS

Throughout the four years of our team's existence, we have nearly doubled the number of participants. This exponential growth presents the risk that we cannot effectively engage all of our members with the mentors and other functional areas within our organizational structure.

MENTORS

Even with the increased number of students, we've kept a high mentor-to-student ratio. Half of our mentors have experience with FIRST Robotics, but many do not have children on the team. At any time they could choose to leave, possibly crippling the team. To reduce this risk, The Riveters set a goal for mentors and student leaders to train the younger students in the engineering and mechanical skills they need to build a robot. We plan to continue this “train the trainer” approach between mentors and student leaders, so if we lose skilled mentors, the students already have those skills.

SPONSORS

The team operates with a budget surplus so that, if we were to lose funding in the areas of sponsorships, grants or student fees, we could continue with a small adjustment to expenses until funding can be replaced. We also actively look for new sponsors to replace any the leave us.

SPACE

We were previously located off campus at a facility leased by one of our mentors, but he sold his business and the space is no longer available. As of December 2016, our workshop and meeting space have moved into Mercy High School, and we have more students committed to the team and able to meet practically every day. Last summer (2017) the team was offered another storage room adjacent to our shop, which we helped empty and converted to a dedicated space for PEP. The CAD team still has the “CAD Closet” which is really a section of a large classroom hidden by cubicle walls, and BAD frequently uses an administration conference room when they need to meet or collaborate on writing projects.

EQUIPMENT

The equipment is old and was donated by a retired businessman. If any of the equipment breaks down, we would need to spend money from our budget to replace it immediately. The team is slowly purchasing new machinery, such as the new Velox CNC machine purchased in the fall of 2017, however we would need a major fundraising campaign to replace multiple pieces at once.

FINANCIAL INFORMATION

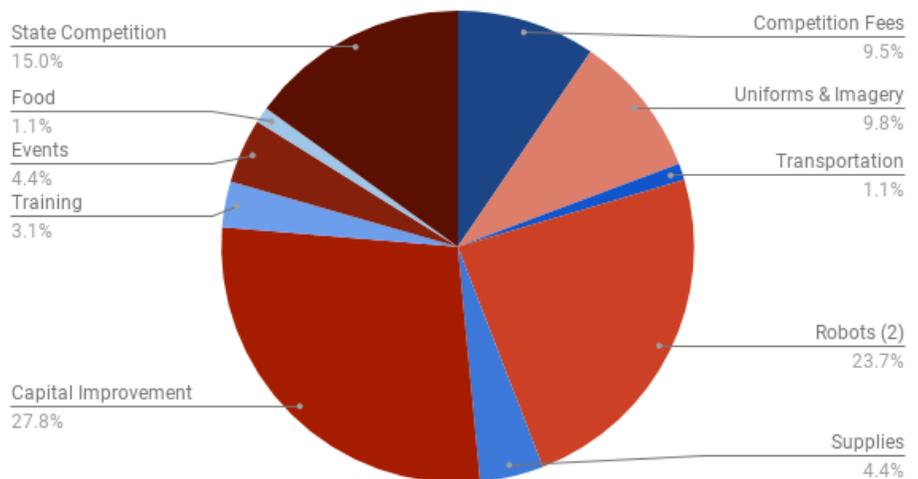
INCOME

The money our team receives comes mainly from student fees, grants and sponsorships. The team's budgeted income is \$58,000.

EXPENSES

Our expenses include the cost to build two robots, workspace capital improvement, equipment, supplies, imagery, events, competition fees and transportation. Our overall expenses for the 2017-2018 season are estimated to be \$56,796. The estimated budget for building two robots is \$13,590, which includes expenses for Programming, Electrical, Pneumatics, Mechanics and field elements.

Expenses



CAPITAL IMPROVEMENT

The budget for capital improvement is \$15,443. This includes capital improvements to create workspace in a former storage room, a new Velox CNC router, two laptops for Business, and non-profit formation.

UNIFORMS AND IMAGERY

The allotted budget for Uniforms and Imagery is \$5,600. This includes the team uniform, spirit swag to give away at competitions, printed materials and graphic designs. Our team sets a higher budget than others for Imagery because one of our long-term goals is to win Imagery at Worlds.

COMPETITIONS AND TRANSPORTATION

We have budgeted \$14,060 for competition fees, including States but not Worlds. This includes transporting the robot to competitions. If we are invited to Worlds, the students who attend will pay a \$100 fee and we will ask for donations for the balance of the cost.

EVENTS

Our budget for Events includes recruiting events and our end-of-the-year banquet. For all of these events, we have allocated \$2,538.

APPENDIX

Team 1481 Budget 2017-2018

Income

Student Fees (incl. States & Worlds)	31,200.00
Grants	18,000.00
Sponsors (incl. Worlds)	23,500.00
Donations	4,200.00
Total Income	<u>\$76,900.00</u>

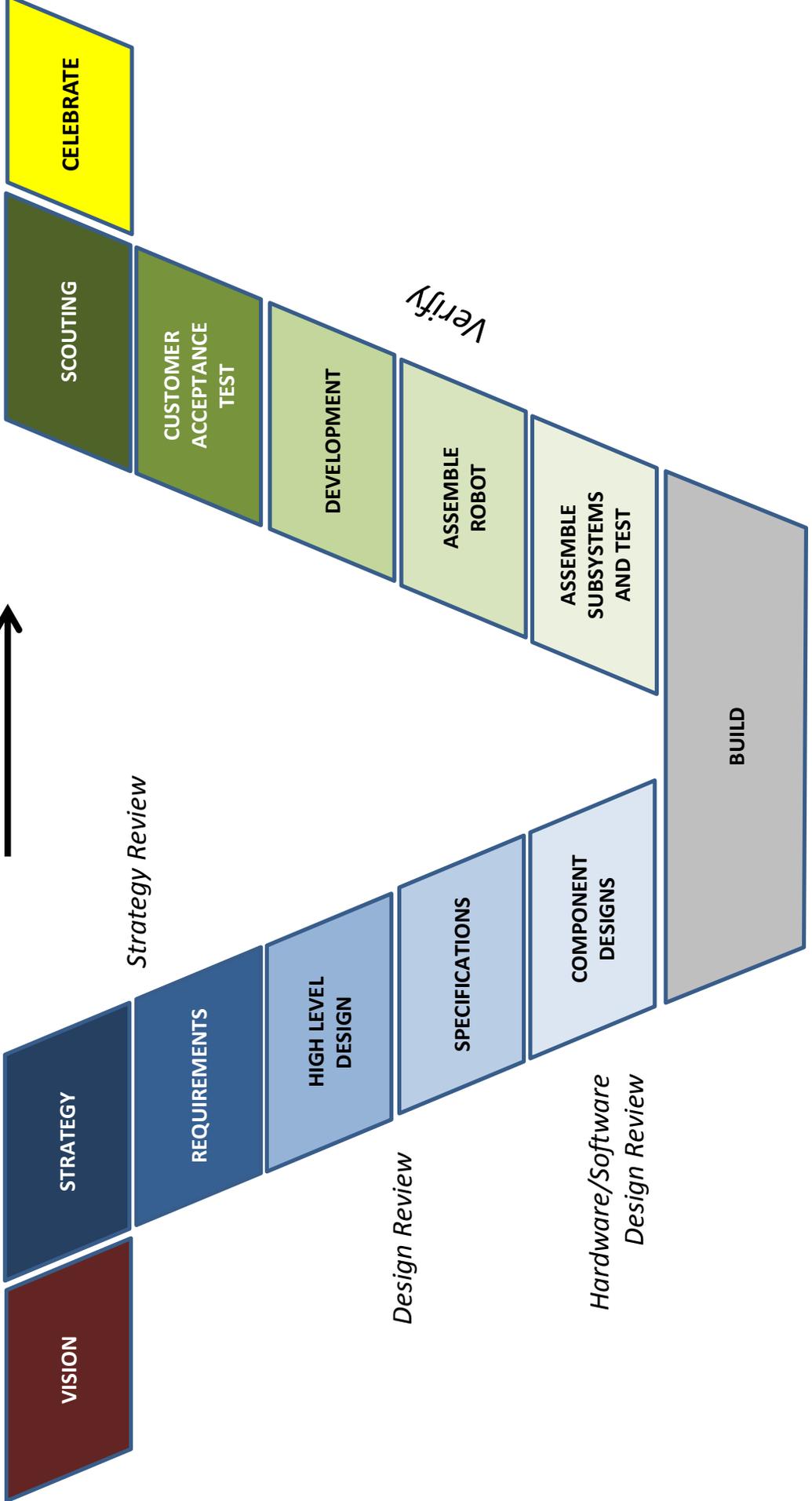
Expenses

Competition Fees	5,450.00
Robots (2)	13,590.00
Capital Improvement	15,443.00
Supplies	2,495.00
Training	1,800.00
Transportation	650.00
Uniforms/Imagery	5,600.00
Events	2,538.00
Food	620.00
State Competition	8,610.00
World Competition	14,470.00
Expenses	<u>\$ 71,266.00</u>

Difference	<u><u>\$5,634.00</u></u>
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System Engineering

Time →





THE RIVETERS

FIRST ROBOTICS TEAM 1481



MERCY HIGH SCHOOL
29300 W 11 Mile Rd,
Farmington Hills, MI
48336
(248) 476-8020

SPONSORSHIP LEVELS		SIGN UP	
<p>PLATINUM Visionary Partner \$10,000+ 1 Opportunity</p>	<p>Benefits/Recognition</p> <ul style="list-style-type: none"> ➤ Corporate profile with logo link on team website home page ➤ Largest Size Logo on robot, pit, uniform, banner ➤ Sponsorship recognition at competition and press releases ➤ Robot at Company Event ➤ 4 Team Celebration Guests 	<p>Established 2014</p>	<p>BUSINESS/COMPANY NAME</p>
<p>TITANIUM Sustaining Partner \$5,000+ 4 Opportunities</p>	<p>➤ Corporate profile with logo link on sponsors page of team website</p> <p>➤ 2nd Largest Size Logo on robot, pit, uniform, banner, print media</p> <p>➤ Sponsorship recognition at competition and press releases</p> <p>➤ Visit Team Workshop</p> <p>➤ 2 Team Celebration Guests</p>		<p>ADDRESS</p>
<p>GOLD Major Partner \$2,500+</p>	<p>➤ Company logo on sponsors page of team website</p> <p>➤ 3rd Largest Size Logo on robot, pit, uniform, banner, print media</p> <p>➤ Visit Team Workshop</p> <p>➤ 2 Team Celebration Guests</p>		<p>CITY, ZIP</p>
<p>SILVER Supporting Partner \$1,000+</p>	<p>➤ Company logo on sponsors page of team website</p> <p>➤ Standard Size Logo on pit, uniform, banner, print media</p>		<p>CONTACT(S)</p>
<p>BRONZE Community Patron \$500+</p>	<p>➤ Name on sponsors page of team website with referral to your web presence</p> <p>➤ Name on banner</p>		<p>WEBSITE:</p>
		<p>MHS The Riveters Rep:</p> <p>Additional questions/comments, please contact:</p> <p style="text-align: center;">Dan Riehl, Mentor driehimi@gmail.com or Clarisa Russenberger russenbergerc@mhsmi.org</p>	<p>PHONE:</p>
		<p>Thank you for your contribution of</p> <p style="text-align: center;">\$</p> <p>Checks should be made out to "Mercy High School" with a note for "Robotics" on the check or we can invoice if required.</p>	<p>E-MAIL:</p>

Social Media Strategy by Priyanka John

Goal: Inspire others to pursue interest in STEM fields by sharing information and exchanging ideas online

Criteria: Content should directly relate to FIRST Robotics, STEM, innovation and technology especially by women, Mercy High School, or other themes directly related to our team and the FRC community

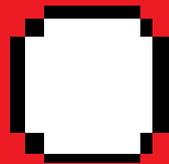
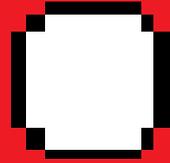
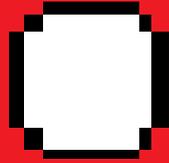
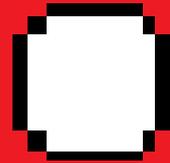
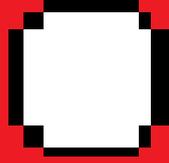
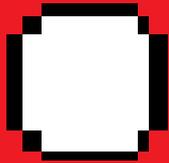
Buckets:

- Content - informational and inspirational posts
- Traffic - posts designed to drive traffic to the website and other platforms
- Followers - posts designed to drive interaction and increase followers and fans
- Outreach - posts designed to highlight FIRST Robotics and our program

Social Media Outlets*:

- Facebook
 - Audience - parents and sponsors
 - Frequency - twice a week, Saturday and mid-week
 - Content - behind the scenes photos, quotes, newsletters, spotlight on sub-teams, announcements, etc.
- Twitter
 - Audience - other teams, FRC, sponsors, the robotics community in general
 - Frequency - 10 times a week (pre-scheduled with Buffer), Saturday Q&A
 - Content - One meaningful tweet, poll, questions, trivia fact, article links, weekly “did you know”, motivation Mondays, who’s your Rosie, contests, shout-outs, blogpost links, industry news (FIRST, women’s issues, etc.) announcements, event updates, play-by-play, team interactions
- Instagram
 - Audience - parents, students, other teams
 - Frequency - twice a week, Saturday and mid-week
 - Content - behind the scenes photos and videos, highlight sponsors
- Snapchat
 - Audience - students
 - Frequency - during events and other free time
 - Content - play-by-plays, updates, etc.

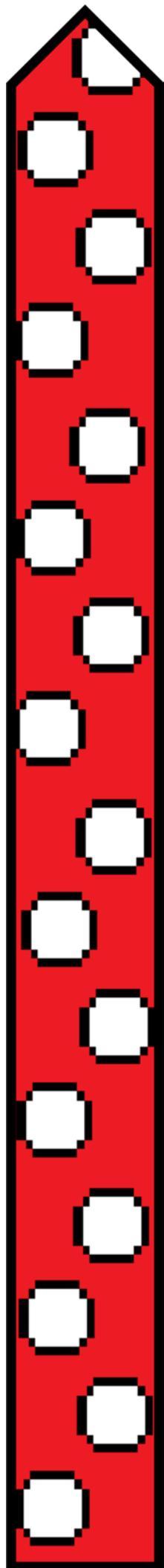
*Additional content posted coming up to, during, and after big events and holidays (e.g. Bag day, States, Worlds, Auto-show, other outreach events, Black History Month, Women’s National History Month, National Popcorn Day)



1481 THE RIVETERS

2018 STYLE GUIDE

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Catherine McAuley

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Language

PAGE 7- TYPOGRAPHY

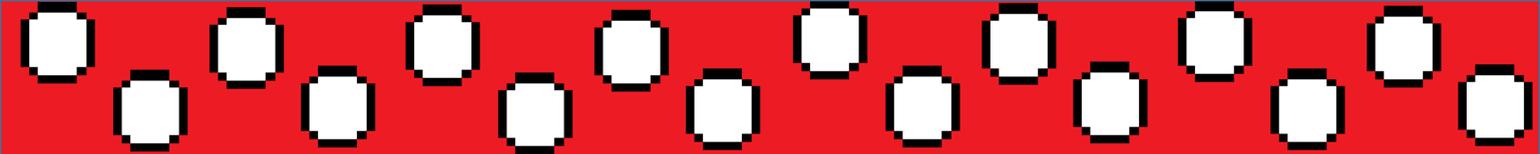
Fonts

PAGE 8 - COLOR

Primary colors
Secondary colors

PAGE 9 - VISUALS

Icons
Imagery
Uniform



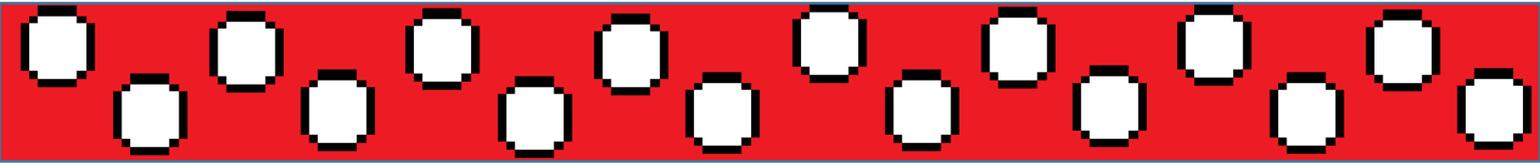
ABOUT US

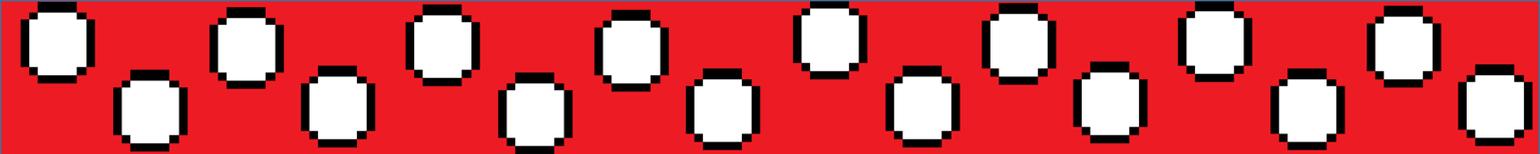
WHO ARE THE RIVETERS?

Rosie the Riveter is the iconic female figure of those who worked in defense industries during WWII. The term “Rosie” inspired a social movement that increased the number of working American women from 12 million to 20 million in 1944. The image of “Rosie the Riveter” resembled the majority of working women during this time period. What unified the experiences of these women was that they proved to themselves and the country that they could do a “man’s job” and do it well.

Team 1481 kept this information in mind when choosing their team name, The Riveters. For an all-girls high school robotics team, Rosie is a powerful symbol that inspires young girls to follow their interests in the STEM fields of study. We incorporate Rosie’s image into our team uniform, robot, print and social media. We not only use Rosie’s outfit and colors, but her authenticity, her determination, and her hardworking spirit. This year, we focused on these three main qualities, and used our various platforms to inspire young women to strive for their goals. Our main goal is to embody Rosie’s “We Can Do It!” spirit to achieve our goals and overcome obstacles as a team.

An important figure to Mercy High School is Catherine McAuley, founder of the Sisters of Mercy. Catherine recognized the many needs of the people who were economically poor in the early nineteenth century Ireland and determined that women like her could make a difference. Her main goal was to establish a place to shelter and educate women and girls. Mercy High School is founded on the values of human dignity, option for the poor, justice, service, and mercy. As a team, we try to inspire these values through our outreach, community events, and competition.





STRATEGIC IMAGERY

WHAT IS STRATEGY?

A plan of action or policy designed to achieve a major or overall aim.

WHAT IS 1481'S OVERALL AIM?

Attractiveness in engineering, and outstanding visual aesthetic integration of machine and team appearance.

We have created a blueprint where each new season, our team can craft an Imagery strategy that is complementary to the new game while staying true to the The Riveter's core style and aesthetics.

HOW?

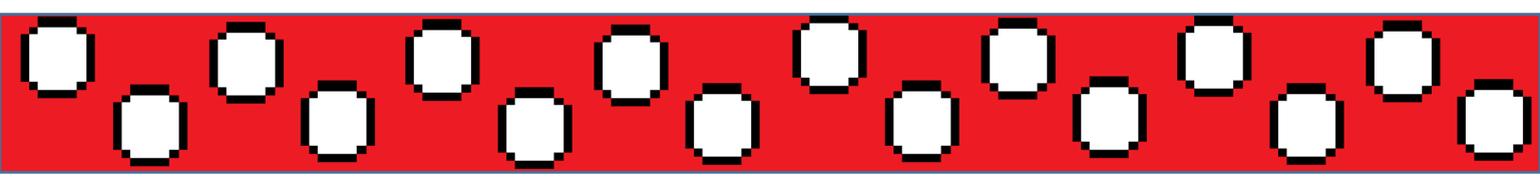
We identified elements of “Rosie” that are core requirements of our overall design aesthetic, then chose elements that we can reimagine and modify each year. We encourage original ideas and take our Rosie to the next level with a new incarnation each season. We want to support our brand and avoid becoming redundant or boring.

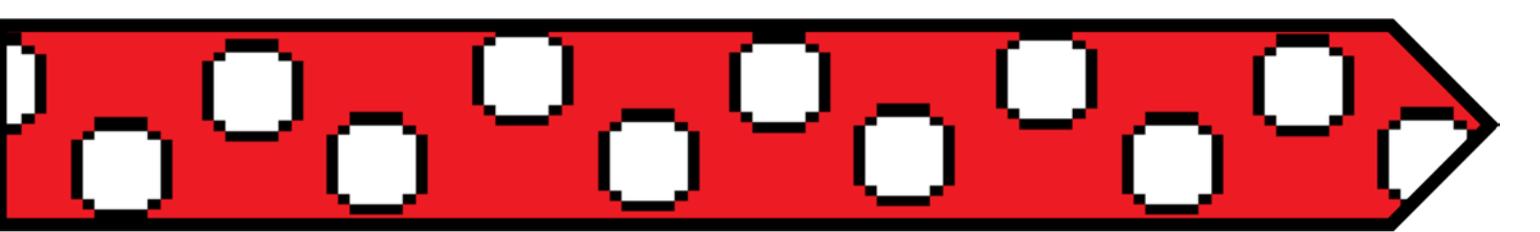
ELEMENTS THAT REMAIN TRUE TO ROSIE THE RIVETER

Blue work shirt, dark denim pants, work boots
White Polka Dots on Red Background
WWII-era inspiration

ELEMENTS THAT ARE OPEN TO INTERPRETATION

Use of bandana (arm band, head band, etc.)
Actual use of polka dot pattern
Socks





LANGUAGE

TAGLINE

We Can Do It!

MOTTO

Women Who Make A
Difference

BRAND

1481 The Riveters, or FRC
1481 The Riveters

INTERNET

@1481TheRiveters for
mentions

NAMING CONVENTIONS

(555) 555-5555

Visit us from 7pm-9pm

October 5th

10/05/18

DESCRIPTORS

How we see ourselves

DRIVEN

ENGAGED

DETERMINED

ENTHUSIASTIC

ACTIVE

ORGANIZED

FUN

INSPIRING

PASSIONATE

INNOVATIVE

EXPLORING

OPEN MINDED

WELCOMING

COLLABORATE

OPTIMISTIC

FANTASTIC

LIVELY

AWESOME

NICE

HECTIC

PRODUCTIVE

PROGRESSIVE

TRAILBLAZING

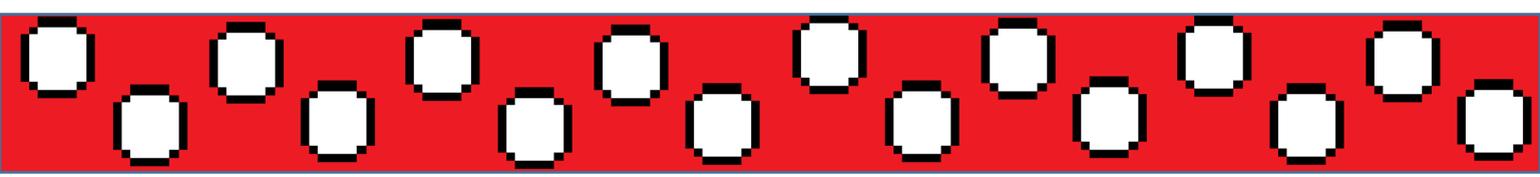
DILIGENT

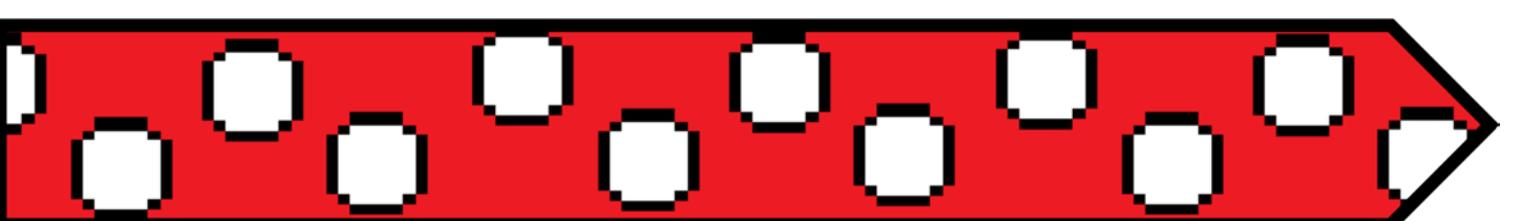
EXTRAVAGANT

STRONG

DIVERSE

CONNECTED





TYPOGRAPHY

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 2 3 4 5 6 7 8 9 0

PRIMARY FONT: HEADERS, TITLES

AVENIDA LET PLAIN

A B C D E F G H I J K L M N O P Q R S T U

V W X Y Z

a b c d e f g h I j k l m n o p q r s t u v w x y z

1 2 3 4 5 6 7 8 9 0

Secondary Font: Body, Text, Captions

Libre Baskerville

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h I j k l m n o p q r s t u v w x y z

1 2 3 4 5 6 7 8 9 0

Tertiary Font: Subheadings

ECONOMICA BOLD

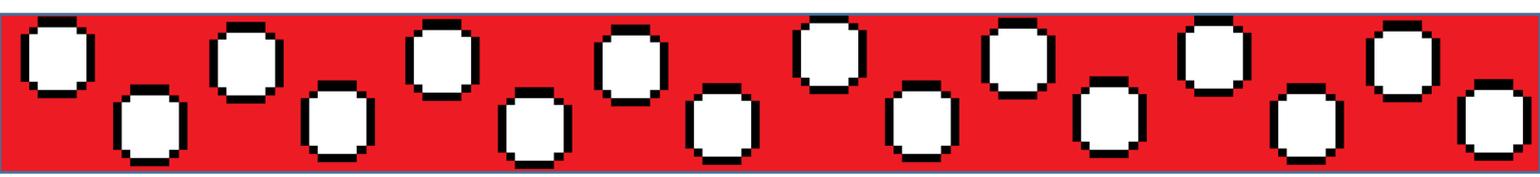
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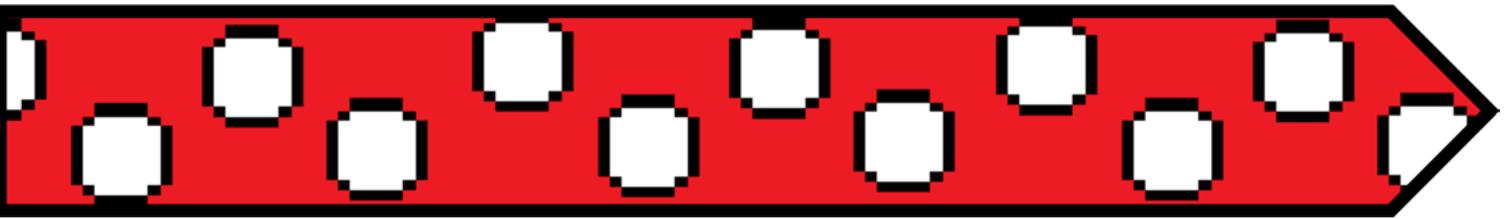
a b c d e f g h I j k l m n o p q r s t u v w x y z

1 2 3 4 5 6 7 8 9 0

Special Font: 2018 Season Special Projects

Pixel-Noir



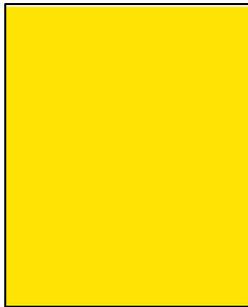


COLORS

PRIMARY COLORS



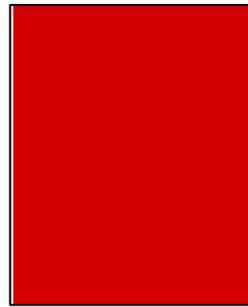
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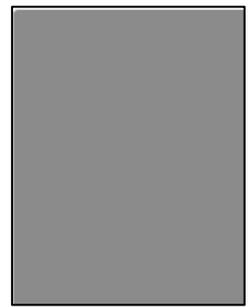
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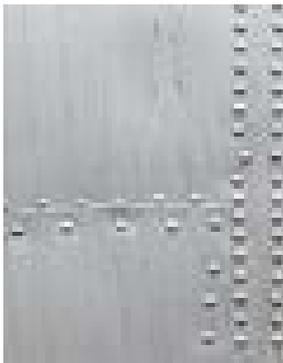


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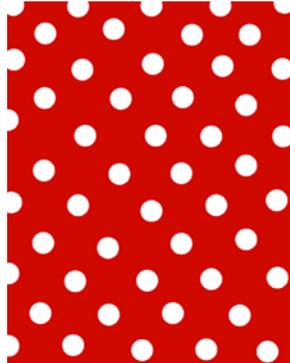


Hex: #8B8B8B
RGB: 139, 139, 139

TEXTURES & PATTERNS



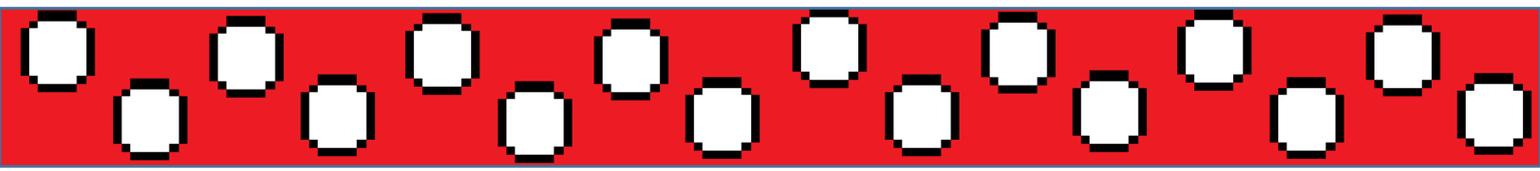
Rivets
Sheet Metal

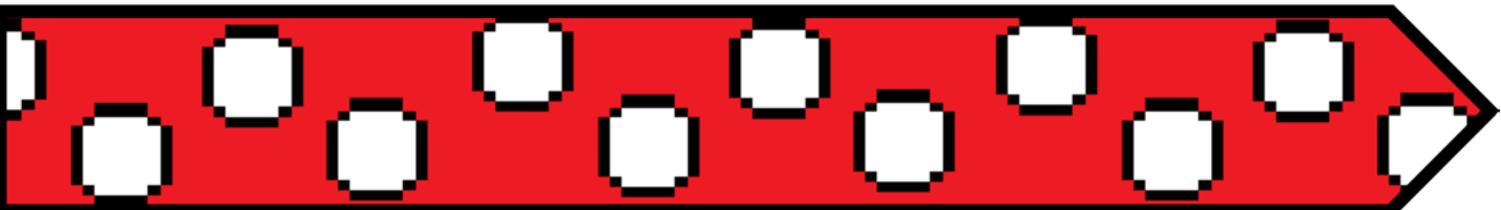


White Polka Dots
on Red
Background

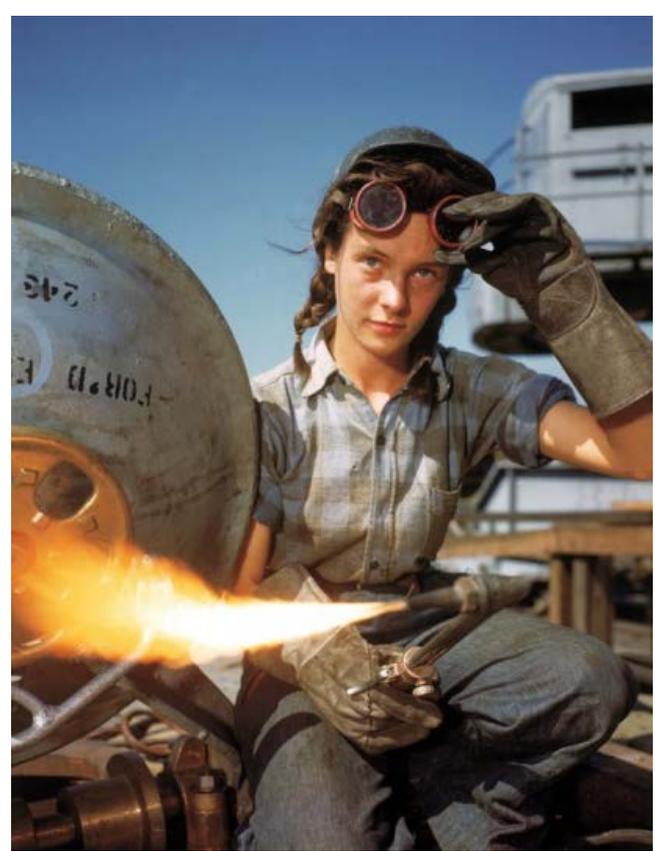


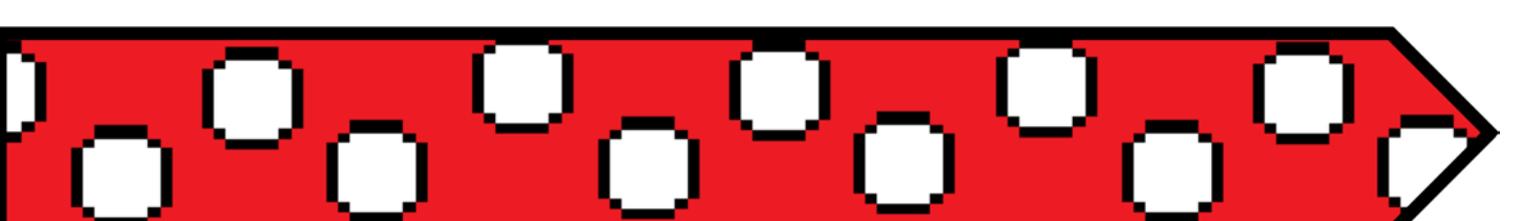
White Polka Dots
on Red
Background
Version 2 (8bit)





INSPIRATION

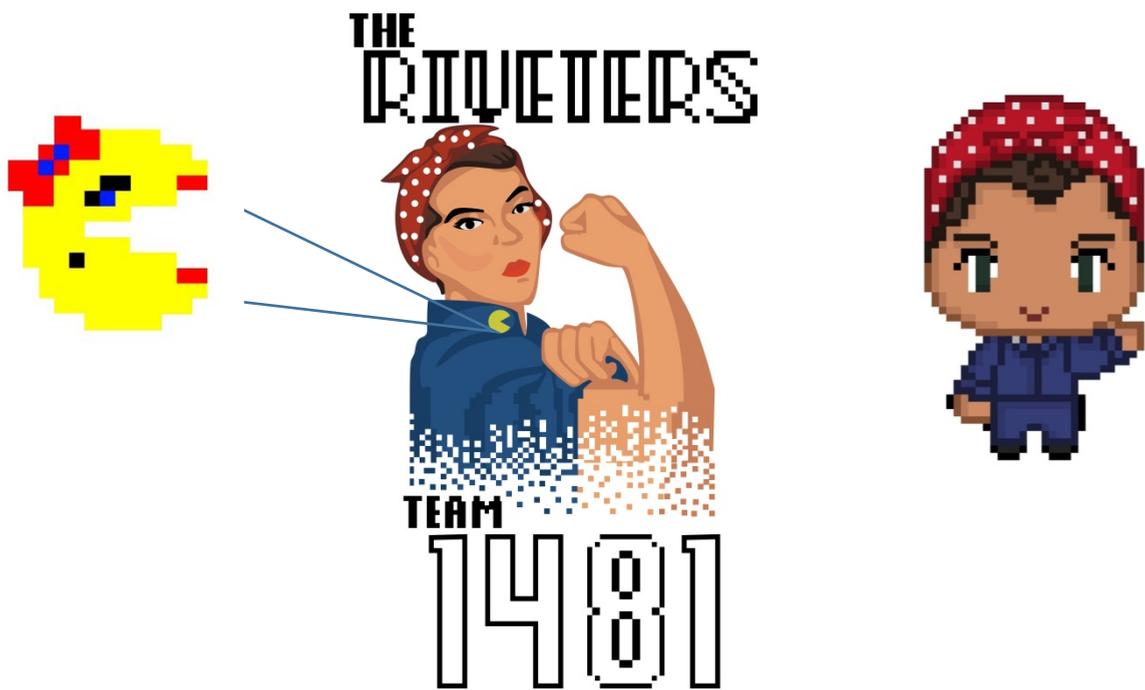




SEASON BADGES

CURRENT SEASON 2018

This year, we have taken Power UP! to the next level with 8-bit inspired plays on our iconic Rosie imagery:



PAST SEASONS



2015



2016



2017