Omni Girls: Work for NASA

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We choose NASA because we all are fascinated by what NASA does and we all want to be either engineers, IT specialists, astronauts , or technicians for NASA. Being career ready means that an individual has the necessary skills and experience to be able to perform well in a specific job or career, and to be able to adapt to new situations and challenges as they arise. It also involves being aware of current trends and developments in one's field, and being open to learning and growing in order to stay current and competitive in the job market. So to be career ready we are going to practice by going to space camp, coding robots, and building with Vex parts.

NASA follows a structured engineering design process to identify and solve problems. The process begins by defining the problem that needs to be addressed, and then generating a list of potential solutions. The solutions are then evaluated and the best one is selected. A prototype or model of the solution is then developed and tested, and any necessary improvements are made based on the results of the testing. Once the final solution works at its best, it is built and the design process is documented for future reference. This process helps NASA engineers to systematically identify and solve problems in a quick and efficient manner, ensuring that the solutions they develop are reliable and effective.When NASA is designing a spacecraft or rover to be sent to another planet, NASA engineers follow the steps of the engineering design process to ensure that the vehicle is reliable, safe, and capable of performing the tasks that it is designed for. NASA uses a lot of materials for prototyping. They use metals such as aluminum, steel, and titanium are commonly used in the construction of prototypes because of their strength, durability, and ability to withstand high temperatures and stresses. We do a similar design process but some things are different. We find the problem and make a list of possible solutions,then we decide on the best one and start building it and multiple times through the build we test it on the field,once we are done we test it on the field once more.

We used NASA's website as our primary resources for learning about the engineering design process and the work of professionals at NASA. The website provided a lot of information about the various projects that NASA engineers work on and the tools and techniques they use in the engineering design process. It also provided details about the education and experience required to work as a NASA engineer, and gave us an understanding of the types of tasks and responsibilities that professionals in this field might have. Overall, NASA's website was a great resource for helping us learn about the careers we are interested in and the steps we need to do in Vex to prepare ourselves for these careers.

Participation in Vex Robotics can help prepare us for careers at NASA by providing hands-on experience and skills that are relevant to various roles within the organization. For example, building and programming Vex robots can help us develop skills in engineering and coding that will be valuable if we want to work as engineers or coders at NASA. Similarly, driving and operating Vex robots can give us a sense of what it might be like to operate a rover or spacecraft, which can be helpful if we want to be astronauts or work in other roles that involve operating complex machinery. Overall, Vex Robotics can provide a valuable foundation for a future career at NASA by giving us the opportunity to develop relevant skills and gain hands-on experience in a fun and engaging way.

Being career ready is important because it can make it easier to find jobs and potentially earn higher salaries. This is because having a strong set of skills, knowledge, and experiences related to a specific career can make an individual more competitive in the job market. In this essay, we learned about the engineering design process at NASA and how it is used by professionals in the organization. Understanding this process has given us a better understanding of what it takes to be career ready in the

field of engineering and has helped us to identify the types of experiences and skills that we need to develop in order to be competitive in the job market. Overall, learning about the engineering design process at NASA has been a valuable experience because we learned what a great design process is. Learning about NASA has also helped us to better understand the importance of career readiness and how we can prepare ourselves for successful careers.