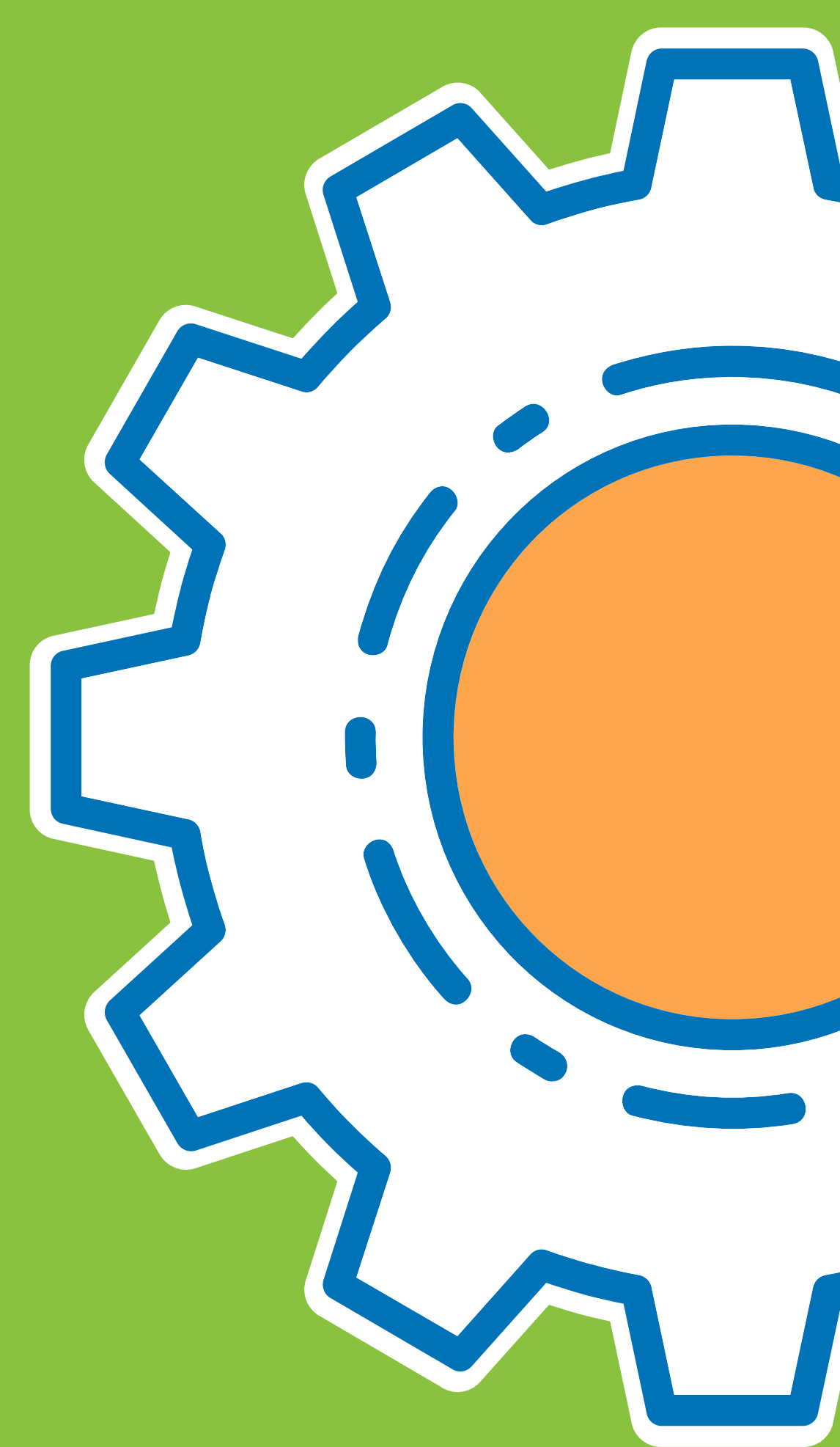


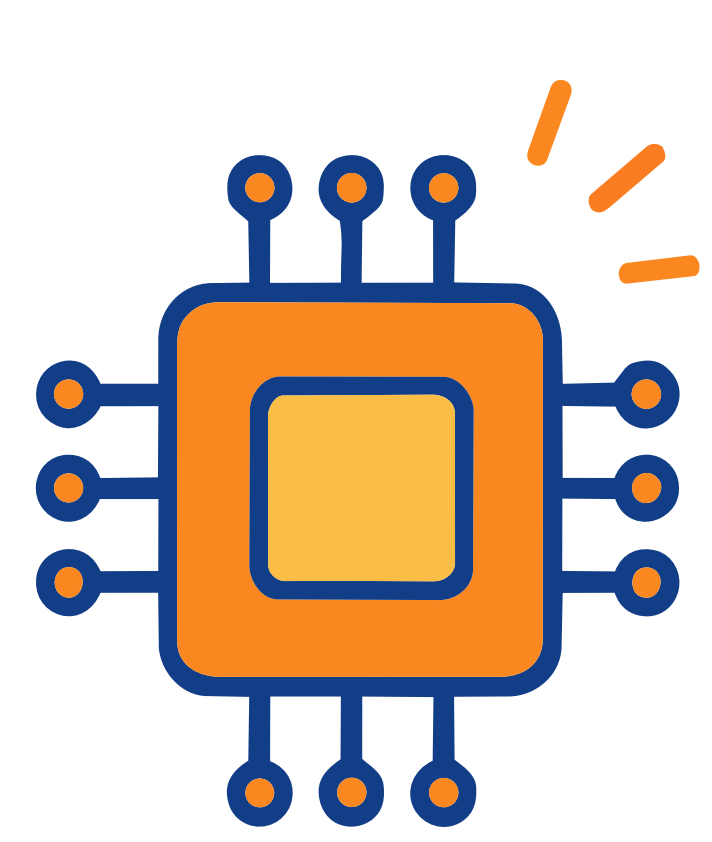
Design. Build. Create



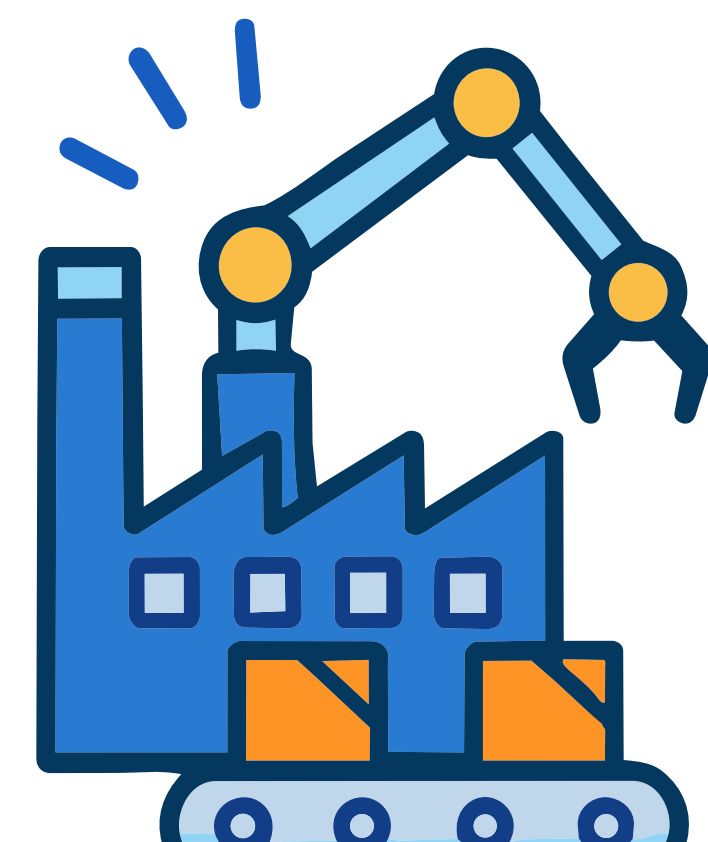
Welcome to Museum on the Move



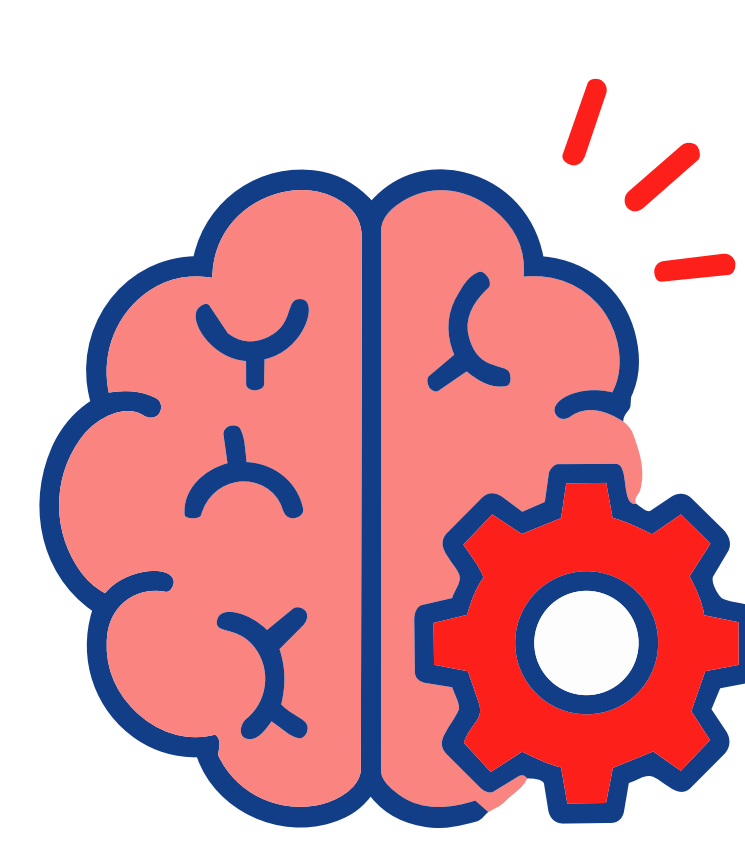
How does an electric vehicle move without gasoline?



How can a tiny computer chip power a phone, robot, or car?



How are products designed, built, and tested in advanced factories?



How do engineers solve problems and turn ideas into inventions?



Every great invention starts with an **idea!** In this exhibit, you'll explore exciting careers, tackle hands-on challenges, and use the same **Engineering Design Process** that engineers and technicians use every day:

THE ENGINEERING DESIGN PROCESS

Ask



Imagine



Plan



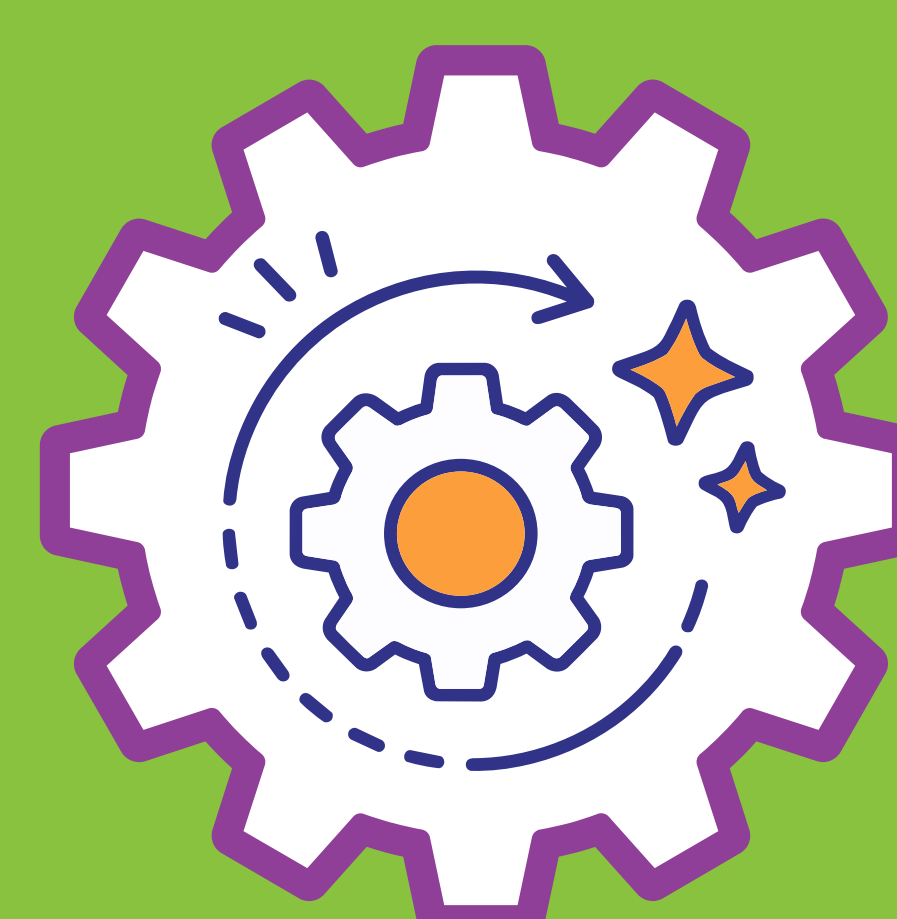
Create



Test



Improve



Visit each station, try something new, and discover
how **YOU** can **HELP SHAPE THE FUTURE!**

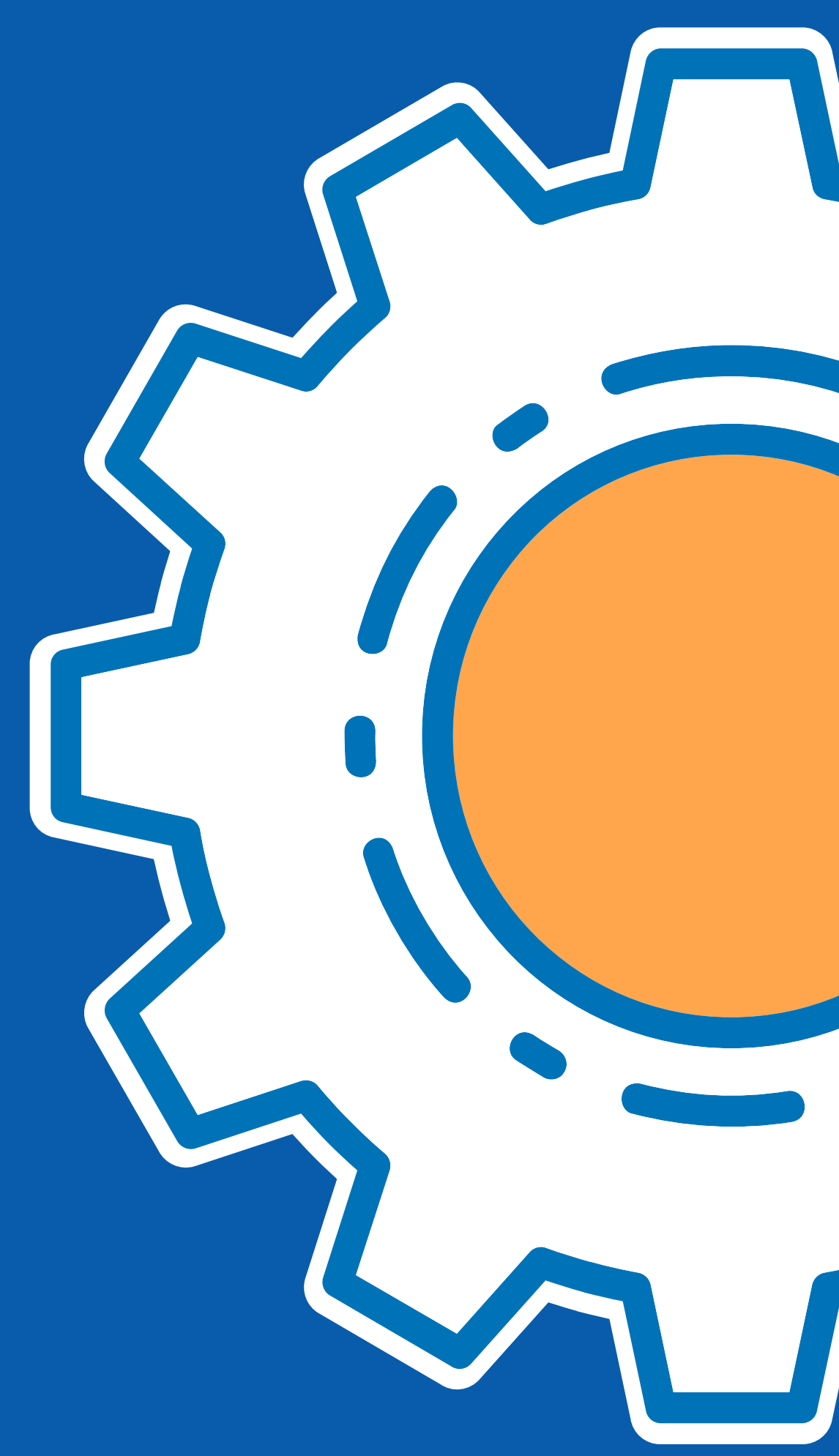


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Build It. Race It. Test It!



Welcome to the Car Design Challenge!

Today, you are an **engineer** and a **scientist**. Your mission is to build different kinds of cars, race them down the track, and discover which design travels the farthest!



Photo courtesy of Nexteer Automotive.



Photo courtesy of Nexteer Automotive.

Engineer at Work

Mechanical Design Engineers are the people who help imagine, design, and improve the cars we use every day. They create ideas for how a car should move, turn, stop, and keep passengers safe. Using creativity, science, and problem-solving, they design car parts such as engines, wheels, doors, seats, and safety features.

Real engineers build, test, and redesign every day!
They use skills such as:



Asking questions



Creative thinking



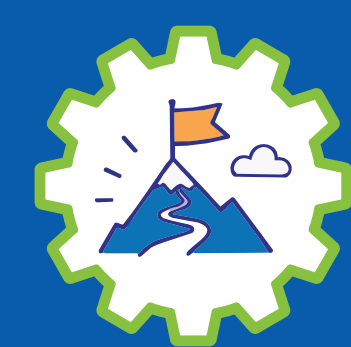
Problem-solving



Testing ideas



Teamwork



Persistence



Following procedures



Safety Awareness

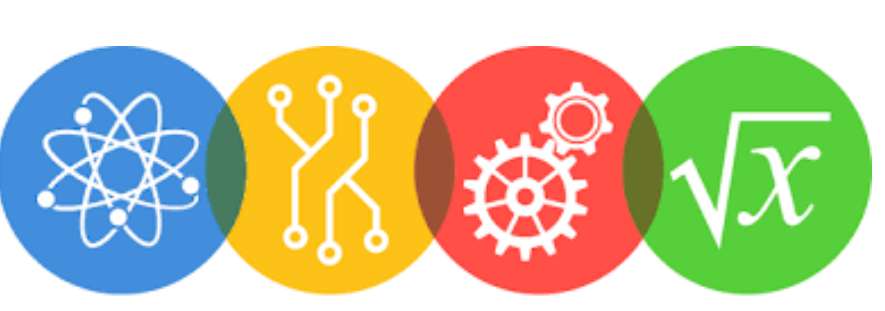


Measurement



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Snap Into Electricity!

Welcome to the Snap Circuit Challenge!

Today, you will become an **electronics technician** by building real working circuits using snaps, switches, lights, fans, and buzzers.



Electrifying our World

Electronics Technicians use observation, problem-solving, and teamwork to build, test, and repair electronic devices—from computers and game systems to robots and electric vehicles. They connect circuits, check equipment, and troubleshoot problems to find out why something isn't working. Using science, technology, and careful testing, they help keep machines, computers, robots, and other devices running smoothly. Every day, they ask questions, test solutions, learn from mistakes, and work together to solve challenges and improve technology.



Real technicians test many different designs before finding the best solution. Every experiment teaches you something new! They use skills such as:



Problem-solving



Testing and observation



Building and redesigning



Creativity



Critical thinking

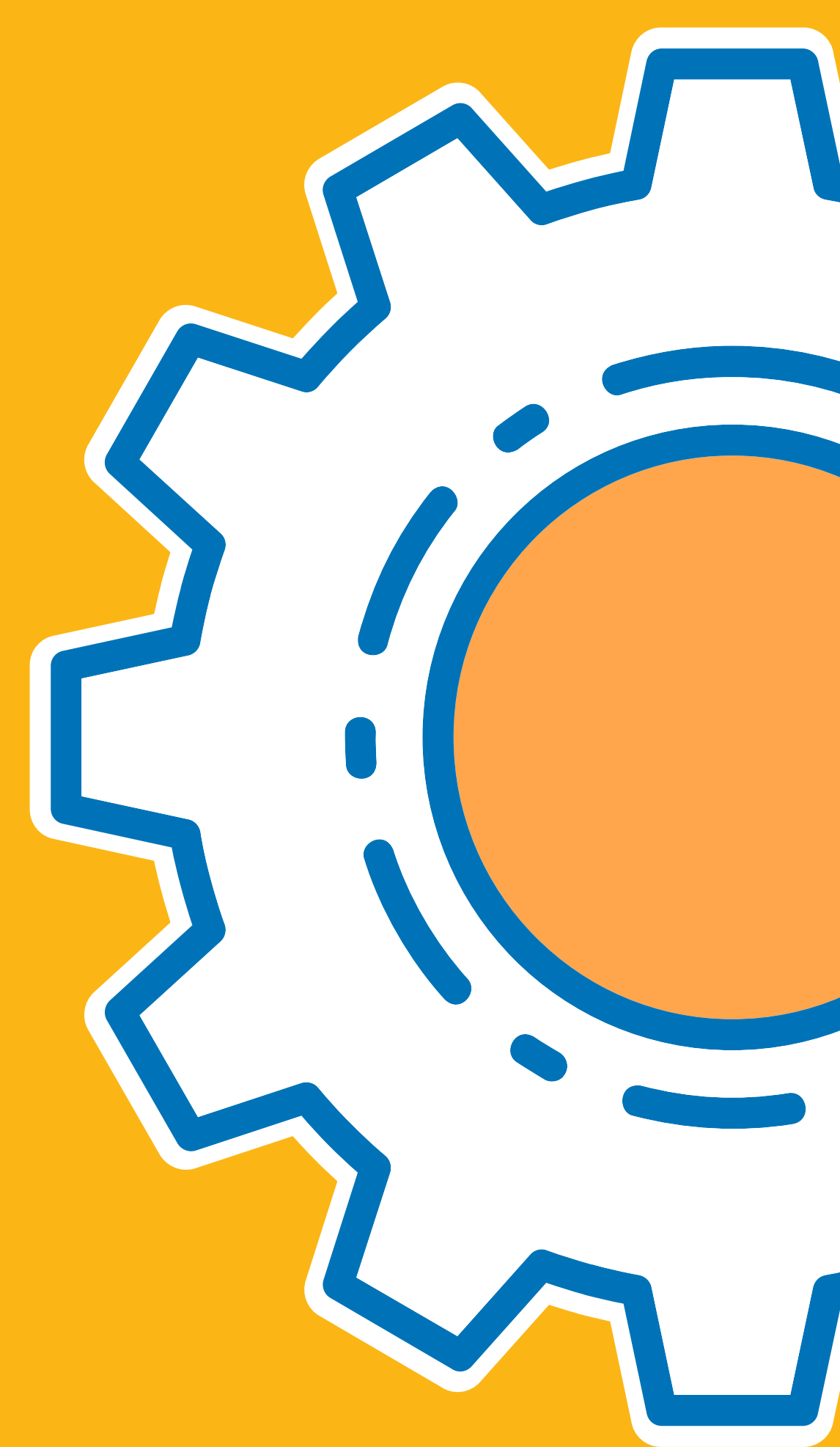


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Wind Tunnel Lab



Welcome to the Wind Tunnel Challenge!

Today, you are both an **engineer** and a **scientist**. Your mission is to design, test, and improve objects inside a wind tunnel to discover how shapes and motion interact with moving air.

Wind Test Specialist at Work

Wind Test Specialists use observation, problem-solving, and creativity to understand how air affects the things we build. They test airplanes, race cars, buildings, sports equipment, rockets, and drones to see how they move through the air. Using wind tunnels and other tools, they study speed, stability, and safety. Every day, they ask questions, test ideas, learn from results, and improve designs to help them perform better.



Wind Test Specialist use skills such as:



Problem-solving



Observation and testing



Redesign and improvement



Creativity



Critical thinking



Airflow Sciences Corporation

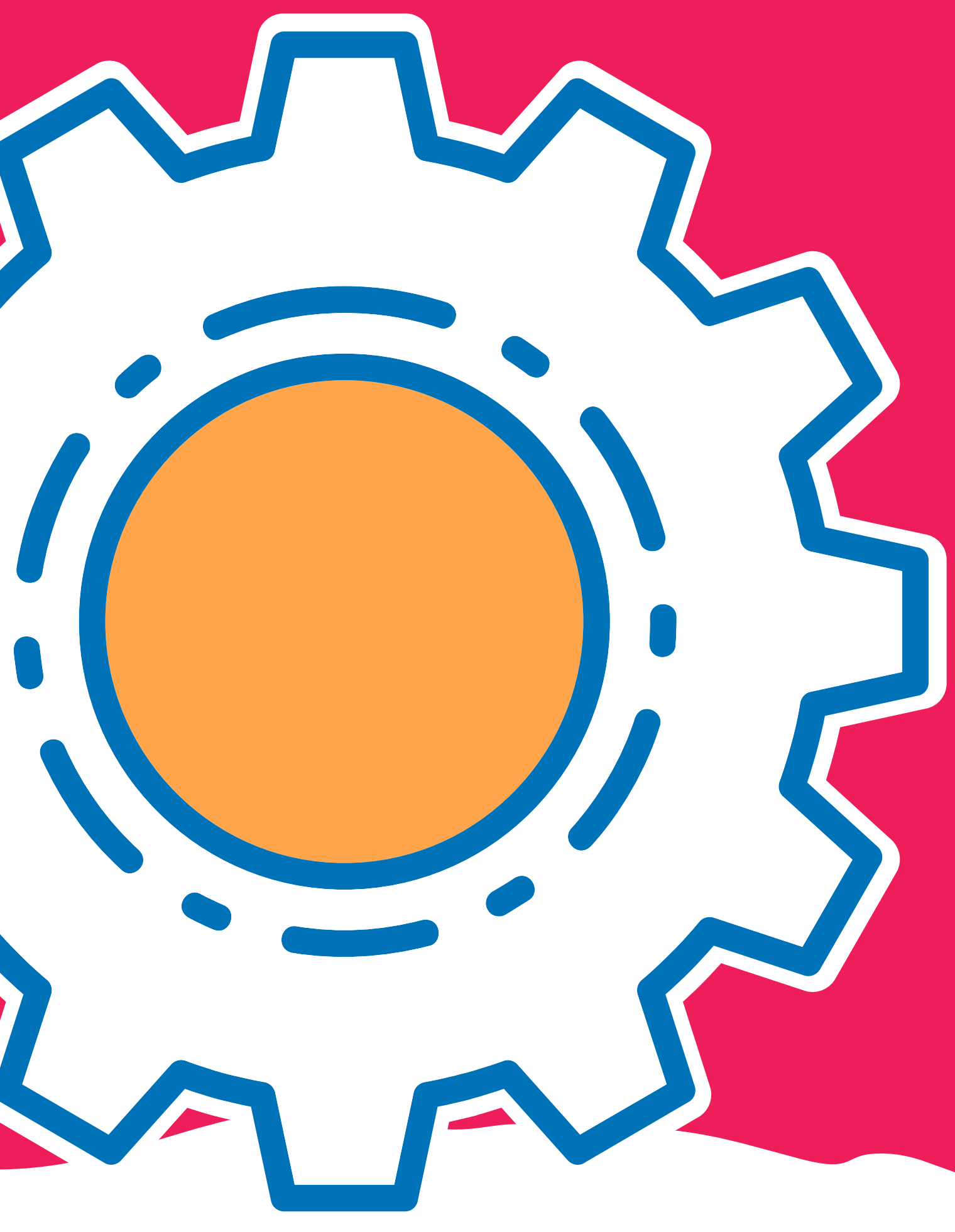


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Refinement Zone



Welcome to the Refinement Zone!

Today, you are an **engineer** and a **problem-solver**. Your mission is to design, evaluate, and improve a vehicle prototype that meets specific requirements. Just like real engineers, you'll create ideas, compare designs, and make changes to improve performance.



Process Engineer at Work



Process Engineers help create better ways to make products. They study designs, test ideas, collect data, and look for ways to improve quality, efficiency, and performance. They work with technicians and manufacturing teams to solve problems and make sure products meet important requirements. Every day, they ask questions, test solutions, learn from results, and refine designs to create the best possible product.

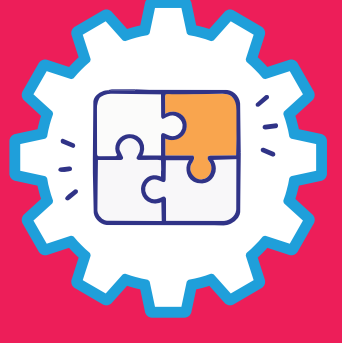
Process Engineers use skills such as:



Problem-solving



Critical thinking



Measurement and data analysis



Observation and testing



Communication and teamwork



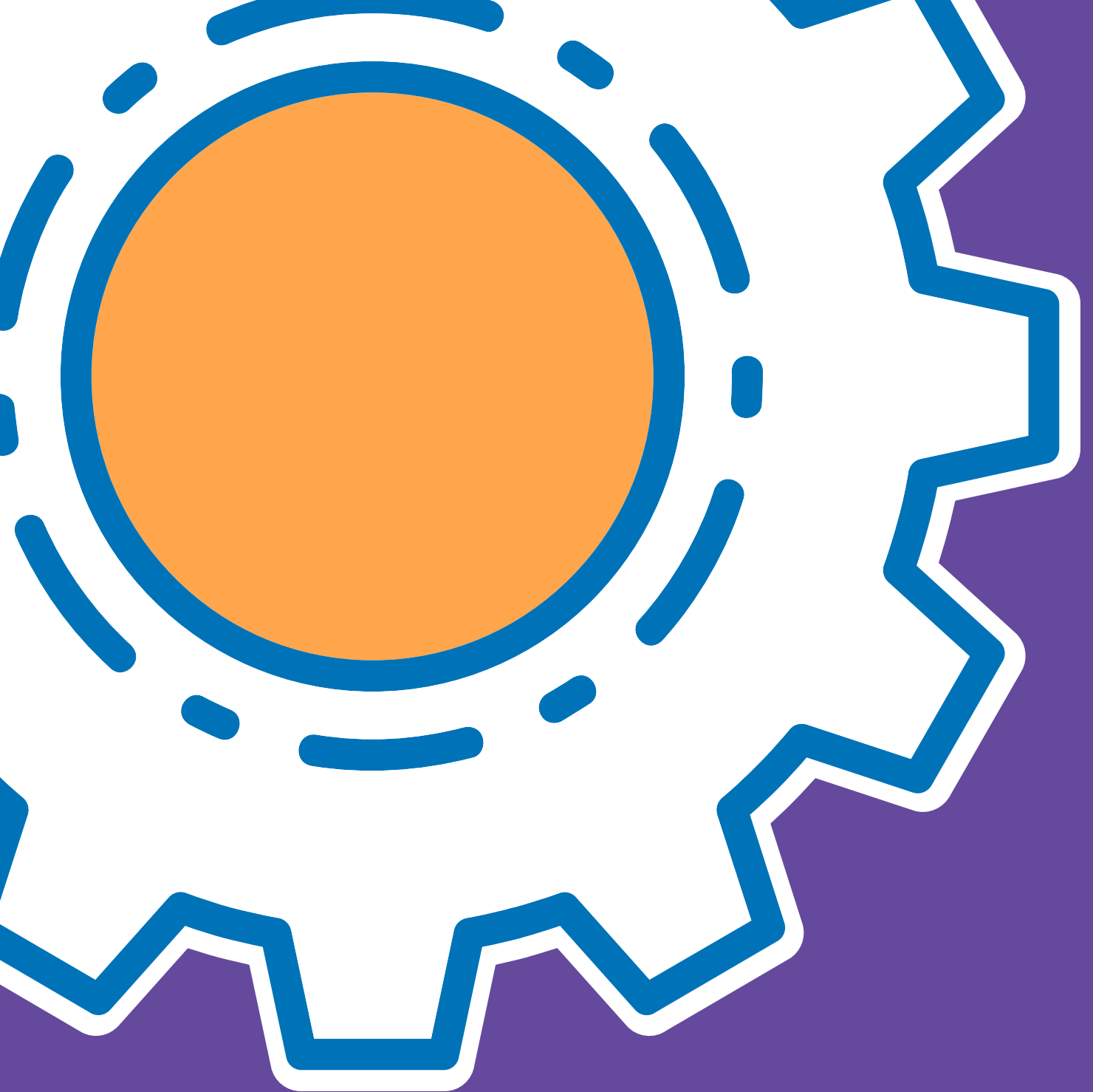
Design improvement and refinement



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Tiny Technology

Welcome to Tiny Technology!

Today, you are a **materials engineer** and a **problem-solver**.

Your mission is to build a model of a silicon crystal—the foundation of computer chips. Just like real semiconductor professionals, you'll observe patterns, make connections, and discover how tiny structures help power modern technology.



Materials Engineer at Work



Materials Engineers study the materials used to create products and technologies. In the semiconductor industry, they help develop and improve silicon crystals that become the foundation of computer chips. They examine structures, test materials, and solve problems to make sure chips are strong, reliable, and able to perform important tasks. Every day, they use science and engineering to understand how tiny structures can have a big impact on technology.

Materials Engineers use skills such as:



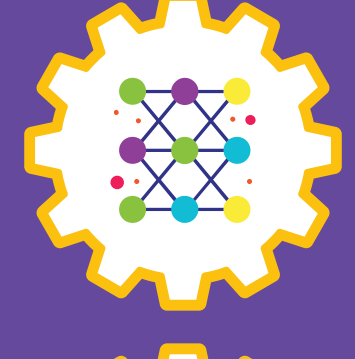
Observation and attention to detail



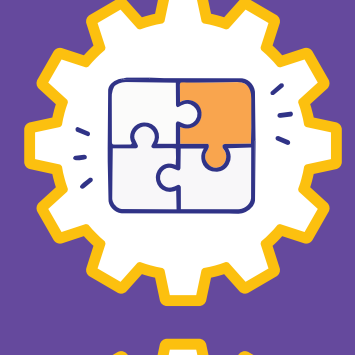
Precision and accuracy



Communication and teamwork



Pattern recognition



Problem-solving



Critical thinking Testing and analysis



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Quality Control Station

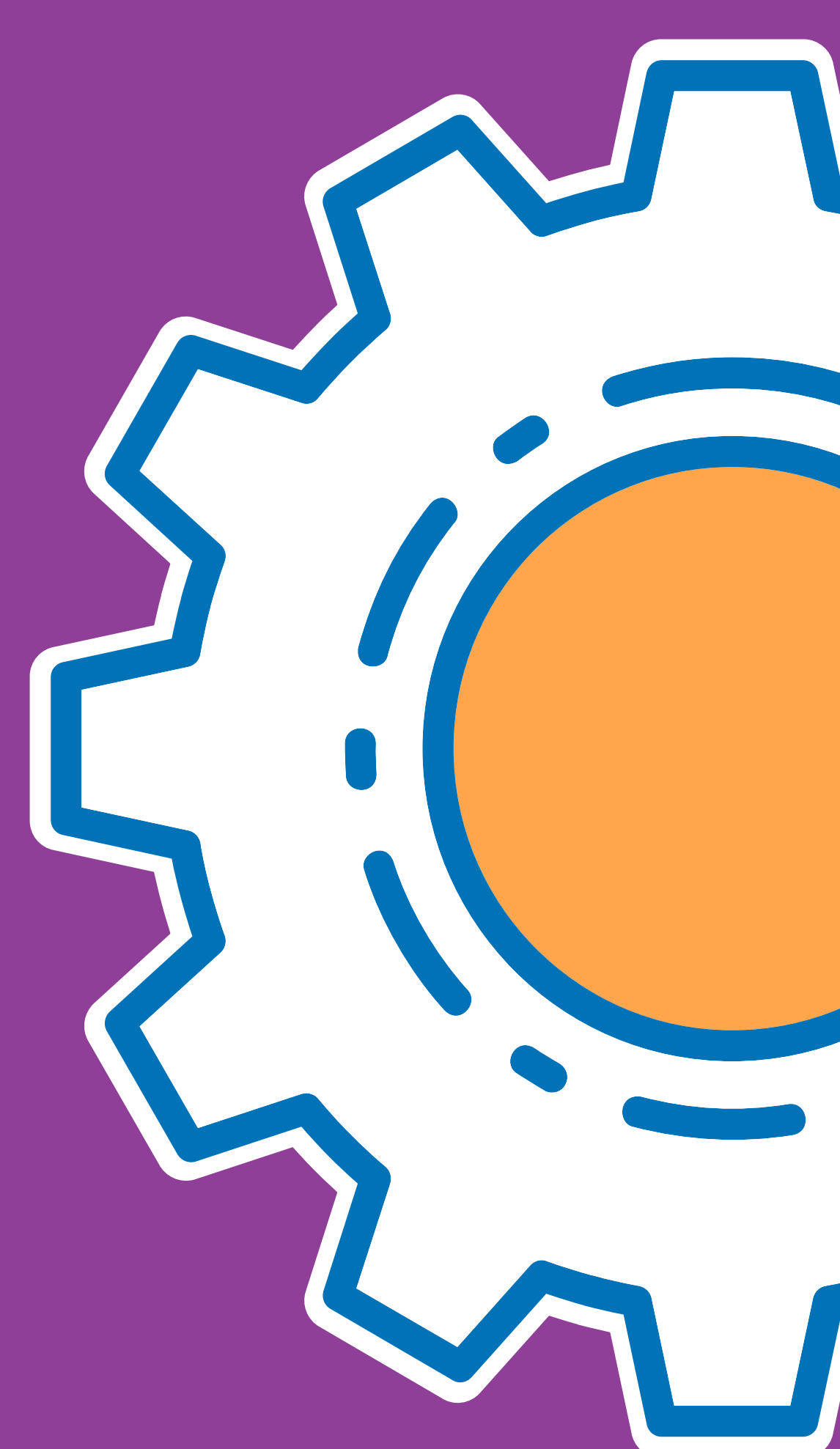


Photo courtesy of Nexteer Automotive.

Welcome to the Quality Control Challenge!

Today, you are a **Quality Control Technician**. Your mission is to inspect machine parts, identify defects, and sort parts into good and bad groups. Just like real quality professionals, you'll use measurement tools, follow inspection procedures, and make decisions based on evidence.

Quality Control Technician at Work

Quality Control Technicians help ensure products meet quality standards before they reach customers. They inspect parts, take measurements, use gauges and testing tools, identify defects, and separate acceptable products from those that need improvement. Every day, they use careful observation and attention to detail to help manufacturers produce high-quality products.

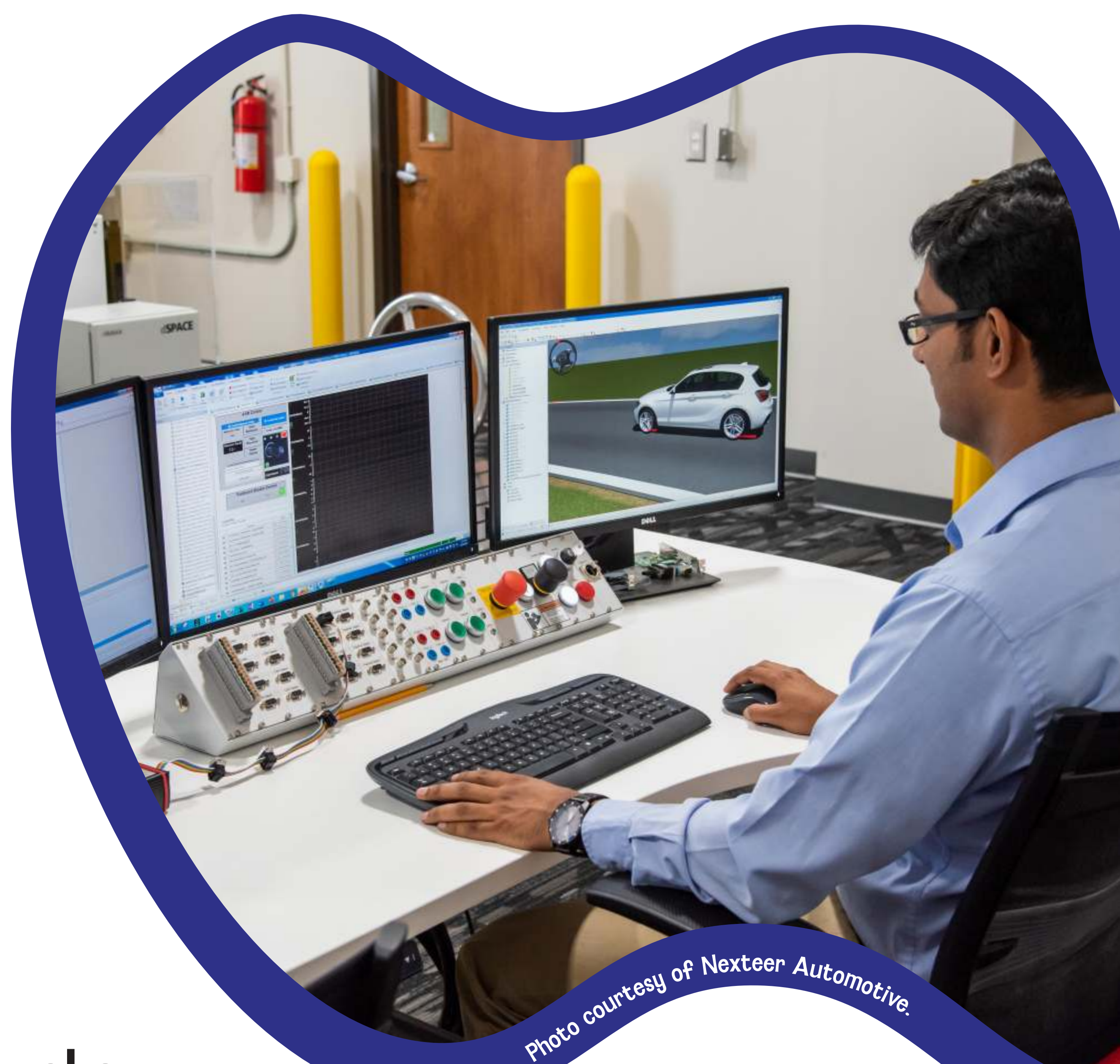


Photo courtesy of Nexteer Automotive.

Quality Control Technicians use skills such as:



Observation & attention to detail



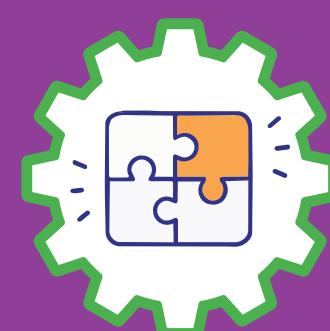
Measurement & data collection



Following procedures



Communication & teamwork



Problem-solving



Quality inspection



Critical thinking



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