YOUR Passport to the Maker's Universe

Name: 
School:
Proud Sponsors of Makers Like YOU

Special thanks to:
- Brianna Morris, CSU Visual Arts Student
- CSU Creative Services
- V3 Media Marketing

A Universe of Possibilities... Making YOUR Future

Do you love MAKING? Creating? Designing? Nice! Check out the universe of possibilities that could be YOUR future...

The Sun is your launching pad to the rest of the Maker Solar System. Start with your ideas and skills you’re building today. Keep Making, challenge yourself in school and stay healthy... and let’s explore where YOU could go from here!

YOUR MISSION:
- Use this passport to explore the 4 planets of the Maker Solar System. As you travel the Faire, ask a Maker from each planet about what they do and how they got there. See the inside back cover for help with questions to ask.
- When you’re done, bring us the completed passport and CLAIM YOUR COOL PRIZE!!

Where do you want to start?

NoCo Manufacturing Partnership
Making Things Makes Things Happen!

AME, Inc. 8760
Advanced Manufacturing Engineering

Super Vac Manufacturing
Fort Collins, Colorado - supervac.com

Vergent Projects
Colorado Manufacturing Days

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Where do you want to start?
Themelio (Foundation)

Who works there?
Assemblers and Fabricators, Shipping/Receiving and Traffic Clerks

What can I make?
- Assemble finished products and their parts (exs. engines, computers, aircraft, ships, toys, electronics)
- Receive incoming materials, prepare outgoing items, arrange transportation of products

Where can I work?
Manufacturing plants, warehouses
Best opportunities for: Workers in high-growth industries

How much can I earn?
$11-17/hour, $22,000-$34,000+/year*
Often full-time, some evenings and weekends; overtime option
Work and pay advances with experience, on-the-job training, certifications

How can I start?
Required: High School Diploma
Learn on-the-job, including apprenticeship programs
Preferred for most skilled positions: Additional training or 2-year associate’s degree from community college
Important skills: Color vision, hand-eye coordination, math, technical, problem-solving, physical strength and stamina


4.5 million jobs in 2012
Peritus (skilled)

Who works there?
Welders, Electricians, Machinists, Mechanics, CNC Programmers, Millwrights

What can I make?
- Join metal pieces in cars, airplanes, bridges, anything!
- Install, repair and replace equipment and machines
- Convert designs into technical plans to help build everything from microchips to skyscrapers

Where can I work?
Indoors and outdoors, factories, job sites, offices and homes
Best opportunities for: Electricians with wide variety of skills

3.5 million jobs in 2012

How much can I earn?
$16-26/hour, $32,000-$52,000+/year*
Often full-time, some evenings and weekends; overtime option
Work and pay advances with experience, on-the-job training, certifications

How can I start?
Required: High School Diploma plus training at technical or community college or 4-5 year apprenticeship
Learn on-the-job
Electricians typically require license
Preferred: Voluntary certifications, continuing education
Important skills: Color vision, math, technical, problem-solving, critical-thinking, customer service, communication

Eidikes (Specialized)

Who works there? Engineering Technicians, Electro-mechanical Technicians, Avionics Technicians

What can I make?
- Assist engineers with design, development and manufacture of devices and equipment
- Repair and perform equipment maintenance and inspections

Where can I work?
Factories, laboratories, aircraft hangers, field

Best opportunities for: Those with hands-on training via internships or certifications, and mastery of new technologies

How much can I earn?
$21-32/hour, $42,000-$64,000+/year*
Often full-time, weekends and overtime common
Work and pay advances with experience, on-the-job training

How can I start?
Required: 2-year associate’s degree from community college
Preferred: Licenses and certifications

Important skills: Math and science, technical, detail-oriented, observational, problem-solving, interpersonal, communication

Larimer, Weld and Boulder Counties (2014)

1 million jobs in 2012
Who works there?
Production Supervisors, Engineers, Sales Reps, Research and Development, Executive Management

What can I make?
- Design and develop tools, machines, consumer products, large construction projects and systems
- Sell complex scientific and technological products or services to businesses
- Oversee strategies, processes and people

Where can I work?
Offices, factories, field

Best opportunities for: Those with mastery of new technologies (ex: 3-D printing), strong leadership and interpersonal skills

How much can I earn?
$22-68/hour, mostly salaried at $50,000-95,000+/year*
Often full-time, could involve extended or irregular hours, travel
Work and pay advances with education and experience

How can I start?
Required: 4-year bachelor’s degree, graduate degree and related work experience often required for management positions

Engineers typically require license and professional certifications

Preferred: Practical experience via coop programs, internships

Important skills: Math and science, technical, creativity, problem-solving, organizational, interpersonal, communication, leadership

* Larimer, Weld and Boulder Counties (2014)
In 2013, manufacturers and makers contributed $2 trillion to the economy.

Taken alone, manufacturing in the U.S. would be the 8th largest economy in the world!

Manufacturing employs 12 million+ Americans (9% of people working).

Manufacturing supports high-growth industries including oil and gas, alternative energy, high-tech, aerospace, and telecommunications.

In 2013, the average manufacturing worker in the U.S. earned $77,500 annually, including pay and benefits. The average worker in all industries earned $62,500.

Manufacturers in the United States:

- Are the most productive in the world.
- Drive more innovation than any other sector.


Did you know?

Today’s manufacturing is about advanced technologies, state-of-the-art facilities, and fast-paced work environments. But most of all, manufacturing is about those people who like to see the product of a hard day’s work.

National Association of Manufacturers
More about Making

Take your passport home, check out these videos, and join The Maker Movement!

Manufacturing is Cool  
manufacturingscool.com/

Manufacturing: Your Future?  
www.youtube.com/watch?v=wk4SjFWD6tg

Making a Longboard  
vimeo.com/84958260

Assembling an Airplane in 3.5 minutes  
www.youtube.com/watch?v=H.olh7qxCbQ

Learn from other makers  
learn.adafruit.com/

Start a project  
learn.sparkfun.com/start_a_project

Questions for YOUR Mission:

• Makers are proud of their work, so don’t be shy. They’d be happy to share their story with you.
• If you don’t know how to ask, you can start with:
  - Tell me more about what you do.
  - What other makers do you work with?
  - When did you know you were a “maker”?  
  - What type of education and training do you have?
  - How did you get to where you are today?
  - What are your goals for the future?
  - What’s a typical day like for you?
  - What’s the best part about your work?
  - The worst?

Scan these codes with the QR code reader on your smartphone.
How Was YOUR Trip?

**Your final step:** Tell us about YOUR interplanetary journey!

Who was your favorite Maker at the Faire? Why?

_________________________________________________________________

_________________________________________________________________

What did you learn today?

_________________________________________________________________

_________________________________________________________________

What surprised you?

_________________________________________________________________

_________________________________________________________________

What else do you want to know?

_________________________________________________________________

_________________________________________________________________

Visit our booth near the faire exit to claim your prize – you’ve earned it!