## How it's made...a career!

**Topic**: "How it's made...a career"

## **Competencies:** Students will:

- Demonstrate employability skills such as working on a team, problem-solving and organizational skill.
- Learn about manufacturing careers.

### Length: One - Two Class Periods

### **Objective:** Students will:

- Identify various items in their classroom that were manufactured.
- Describe what types of careers would be found in a manufacturing company.
- Identify educational requirements for careers in manufacturing (optional lesson).

#### **Materials:**

- Made in Florida website www.madeinflorida.org
- Handout = "What is manufacturing?" created by FLATE
- Handout = "What jobs interest you?" created by FLATE
- Flip chart paper
- Markers/crayons

### **Description of Activity:**

- 1. Divide students into teams of two or three students.
- 2. Have students look around the room and come up with a list of at least 3 items in the classroom that were manufactured and 3 items that were not manufactured.
- 3. Briefly discuss the items they selected and how they think the items were made.
- 4. Give each student a copy of "What is manufacturing" and "What jobs interest you?" created by FLATE.
- 5. Using the flip chart paper (this is a great floor activity), have the teams draw out the manufacturing process for one of their items.
- 6. Give teams 20-30 minutes to come up with, 1) their item 2) steps to make their items design put together test market sell/distribute.
- 7. Have students identify what types of jobs would be involved in the making of their item (engineers, designers, quality control, etc).

## (Optional)

- 8. Homework assignment have each student choose one job from their chart. Research "what" it takes to get that job. Students can find career information and educational requirements on the Made in Florida website (<a href="www.madeinflorida.org">www.madeinflorida.org</a>), under Education & Career Pathways and Links.
  - The project must include:
    - Job Title
    - Companies they could work for.
    - Educational requirements High School, Associates Degree, Bachelor's, etc.
    - Diagram showing their career path (see "What is manufacturing?" page 2 handout).
- 9. Share their completed project with the class (optional).

### **Evaluation:**

Students will be evaluated on quality and creativity of their career project, research ability, and demonstration of teamwork skills.



# What is manufacturing?

Discovering great careers in Florida



Manufacturing is...

> a process of changing raw or processed materials into products people can use.

## Manufacturers have...

- many COOL careers that use your imagination and skills with the HOTTEST technologies to make better things for our world!
- > over **16,000 manufacturing** Companies with 400,000 employees.
- > designed products you use every day, from the jeans you wear, to musical instruments you play.

## DO YOU...

- ✓ Enjoy making things and tearing them apart
- ✓ Get excited about using new technology
- √ Work well with teams of people

...then the manufacturing industry may be the place for you!



# What area in manufacturing interests you?



Aviation and Aeronautics



Leisure & Entertainment



Medical



Metals and Plastics



Electronic Devices



Systems Engineering



Food, Paper, Beverage → Cosmetics



Transportation







# What jobs interest you?



Sample Careers

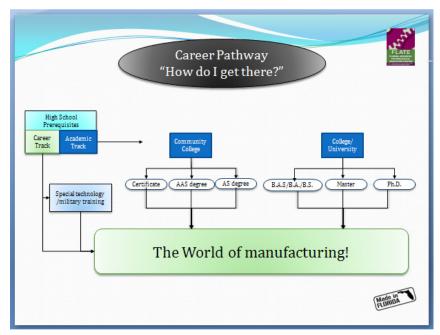
Production Process and Tool Design
Manufacturing Operations
Engineering
Facilities Maintenance
Automation and Controls
Robotics
Materials Handling
Quality Assurance
Packaging Design
Information Technology (IT)

Information Technologies and Marketing Finances
Customer Service

**Product Design** 



# Pathway to a career in manufacturing!







# (for use with OPTIONAL LESSON)

Industry	Companies
Aviation & Aerospace	CAE USA Technology Research Consultants Lockheed Martin Aeronautics
Medical Devices & Equipment	Lorenz Surgical Baxter Healthcare Corporation Promedica
Transportation	Chris-Craft Industries Featherlite Sensor Systems/Fisher Motors
Electronics & Electrical	Tampa Armature Works Universal Microwave Cypress Semiconductor
Food, Beverage & Packaging	Florida's Natural Tropicana Ven-Tel Plastics
Metal Machining & Product Fabrication	 Sun Hydraulics Vulcan Machine Hunter-Douglas
Leisure & Entertainment	Walt Disney Companies Busch Gardens Universal Studios
Product Design & Integration	Sims Machine and Controls L-3 Communications Poly Pack