

# EXPLORATORY TASKS STUDENT SAMPLES

## CLUSTER: Manufacturing

### PATHWAY: Logistics and Inventory Control Pathway

**EXPLORATORY TASK:** Explore the production of a bicycle or other common object. Make a list of all the parts needed. Consider:

- Where these materials or parts would be stored?
- How would these materials or parts be transported to the production area at just the right time?

**OBJECTIVE:** Introduce students to the coordination and planning required to bring products to the consumer.

**TEACHER SUPPORT:** Collaborate with a manufacturing or construction professional or a CTE construction teacher.

**STUDENT SUPPORT:** Provide links, examples, checklist and/or a template for students to use.

#### LEARNING EXTENSIONS:

- Invite a manufacturing or construction professional or CTE teacher to discuss the process of obtaining items needed to produce the different products we use everyday.
- Research manufacturers in your local area to learn about the products they produce and how they transport them to their customers.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of a manufacturing or construction professional.
- Identify and research a career within this pathway.

#### CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS

- Career Studies: ES.I.9, CI.2-8
- Mathematics: KY.7.G.1
- Reading and Writing: R1.4

#### NOTE:

- These samples represent students' first introduction to authentic topics and skills related to a career cluster.
- A range of student performance is included within the complete body of work.

# FURNITURE

#1) In furniture the items that will be needed are , leather 500\$ ,nylon 750\$, wood 155\$.

#2) The items will be moved inside of a moving truck after being shipped

#3) warehouse leather,nylon physical

We did furniture supplies/concepts wood 155\$ leather 500\$ nylon 650\$ and we will be using a ship and trucks to move are items and cost 1000 obtained by retail and virtual stored in warehouse before taken to retail.



wood nylon leather



will form wood out of trees  
turns hide to leather



factory will make the couch

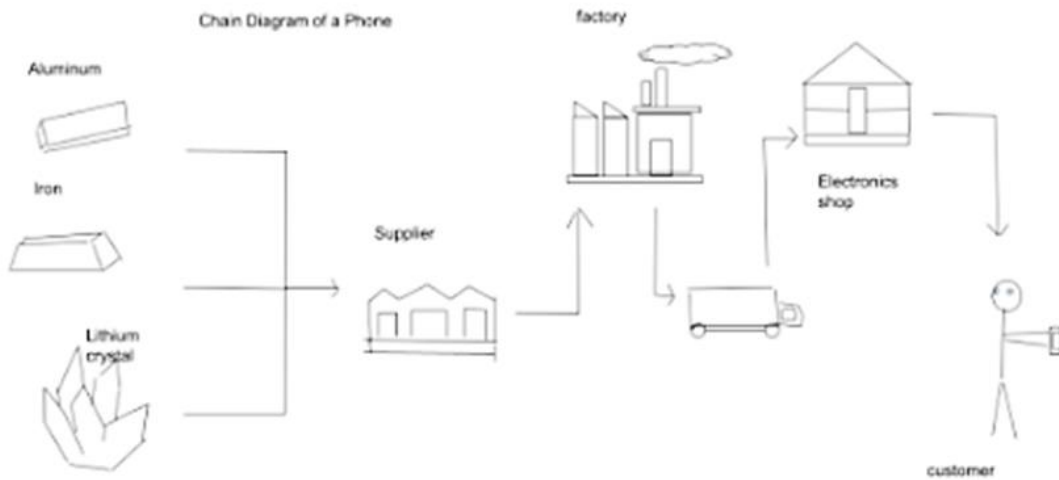


taken to warehouse by truck after  
made and shipped



taken to retail and given to  
customers

# Cell Phones



These are the 3 materials that they use for phones, Aluminum, iron and lithium. Iron cost 4 cents a pound, Aluminum, iron and lithium goes in the supplier, Aluminum cost 59 cents per pound BNEF projects that the cost of a lithium-ion battery pack will fall below US\$100 per kilowatt-hour by 2023, or roughly 20% lower than today. To make the phones they use Aluminum, Iron, and lithium and then they take it to the supplier and then the workers take it to the factory and they make the phone using those ingredients and then they truck it to the electronics shop and they sell them to people.

I [redacted] - drawing

K [redacted] Writing

A [redacted] - research

S



# EXPLORATORY TASKS STUDENT SAMPLES

## CLUSTER: Manufacturing

### PATHWAY: Quality Assurance Pathway

Quality Assurance professionals work to prevent mistakes and defects in manufactured products and avoid problems when delivering products or services to customers

**EXPLORATORY TASK:** Use the United States Consumer Product Safety Commission website to find an item that has been recalled. Use the information to write a news alert or public service announcement to share with others. Consider:

- What type of product was it?
- Why was it recalled and what was the consumer advised to do?
- How many products (units) were sold?

**OBJECTIVE:** Introduce students to the role of quality assurance professionals in creating quality products and ensuring public safety.

**TEACHER SUPPORT:** Collaborate with a quality assurance or manufacturing professional or a CTE construction teacher.

**STUDENT SUPPORT:** Provide links, examples, checklist and/or a template for students to use.

#### LEARNING EXTENSIONS:

- Invite a quality assurance or manufacturing professional or a CTE construction teacher to discuss the process of producing quality products.
- Research manufacturers in your local area to learn about the products they produce and/or their process for quality assurance.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of a quality assurance or manufacturing professional.
- Identify and research a career within this pathway.

#### CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS

- Career Studies: ES.1.9, CI.2-8
- Reading and Writing: R1.4

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# NEWS ALERT: Safety Recall

## Do you own this product?

Schwinn Electric Scooters

## The problem:

More than 11,000 scooters are being recalled because the handlebar grips can loosen or crack. This could cause serious injury to kids if they lose control and fall.



## What to do:

If you bought one of these scooters, you should stop using it immediately. Contact the Pacific Cycle company for a free repair kit. The kit contains all the tools and instructions to repair the scooter. The company provides video instruction and estimated that it will take 5-10 to make the repair. You can also ship the scooter back to the company for repair at no cost to you. Either way, you will need to provide the serial number of the scooter and a mailing address.

## For more information:

Website: <https://www.pacific-cycle.com/safety-notices-recalls/>

Phone: (877) 564-2261



### Is a Career in Manufacturing for Me?

Would you be interested in a career in Manufacturing? Below are knowledge and skill statements related to the careers in this cluster. Read each statement. Decide if this describes you by checking the Yes, No or Maybe box.

THINGS I LIKE TO DO	YES	NO	MAYBE
Work with my hands to create or put things together	<input checked="" type="checkbox"/>		
Do routine, organized and accurate work		<input checked="" type="checkbox"/>	
Perform activities that produce real results	<input checked="" type="checkbox"/>		
Apply math to work out solutions		<input checked="" type="checkbox"/>	
Use hand and power tools	<input checked="" type="checkbox"/>		
Operate equipment or machinery	<input checked="" type="checkbox"/>		
Visualize objects in 3D from flat drawings	<input checked="" type="checkbox"/>		
PERSONAL QUALITIES THAT DESCRIBE ME	YES	NO	MAYBE
Practical			<input checked="" type="checkbox"/>
Observant	<input checked="" type="checkbox"/>		
Physically active	<input checked="" type="checkbox"/>		
Step-by-step thinker		<input checked="" type="checkbox"/>	
Coordinated	<input checked="" type="checkbox"/>		
SCHOOL SUBJECTS THAT INTEREST ME	YES	NO	MAYBE
Math and geometry	<input checked="" type="checkbox"/>		
Chemistry			<input checked="" type="checkbox"/>
Trade or technical courses		<input checked="" type="checkbox"/>	
Physics			<input checked="" type="checkbox"/>
Language arts	<input checked="" type="checkbox"/>		

**Did you check YES most often?** If so, continue to explore careers and opportunities in this cluster. And don't forget to focus on your math and science classes to build the academic skills you need for these careers.

**Did you check NO most often?** If so, don't worry. There are hundreds of jobs to explore in the other 15 career clusters.

**Did you check MAYBE most often?** If so, continue to explore in this cluster as well as investigating how your skills and interests may be a good match in other clusters.

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