EXPLORATORY TASKS STUDENT SAMPLES

CLUSTER: Transportation, Distribution and Logistics

PATHWAY: Transportation Operations Pathway

Specialists in this pathway are always on the move! These are the people that drive or pilot the vehicles that transport people and freight safely, securely, and on time.

EXPLORATORY TASK: What is the best way to transport cargo? Compare the 5 modes of transportation – railways, roadways, airways, waterways and pipelines. Create a comparison graphic to show the benefits, limitations, costs, etc.

OBJECTIVE: Introduce students to the multiple modes of transporting materials and cargo and the factors that influence shipping decisions.

TEACHER SUPPORT:

• Collaborate with a transportation, distribution or logilistics professional or a CTE transportation teacher.

STUDENT SUPPORT:

Provide links, examples, checklist and/or a template for students to use.

LEARNING EXTENSIONS:

- Invite a transportation, distribution or logiistics professional or a CTE transportation teacher to discuss issues and topics the importance of transportation in the supply chain.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of a transportation, distribution or logiistics professional.
- Identify and research a career within this pathway.

CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS

Career Studies: ES.M.8, ES.M.9, C.M.5

Reading and Writing: RI6.4

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.
- This pathway includes a teacher created model.

COMPARING TYPES OF TRANSPORTATION

METHOD	PRODUCTS	SPEED	COST	
Railroad	Most products	Slower	Low	
Roadways	Most products	Moderate	Moderate	
Airways	Most products	Fast	Very high	
Pipeline	Limited to liquid products only	Very slow	Low	
Waterways	Most products	Very slow	Very low	

EXPLORATORY TASKS STUDENT SAMPLES

CLUSTER: Transportation, Distribution and Logistics

PATHWAY: Warehousing and Distribution Center Pathway

These specialists work in distribution facilities including ports, terminals and warehouses. All cargo must be tracked, sorted, labeled and loaded accurately and safely. Timing is important, since loads must stay on a schedule in order to meet customer needs.

EXPLORATORY TASK: Transportation and storage of hazardous materials is highly regulated by federal agencies. What materials could be hazardous in your home? Research information to create a hazardous materials graphic to inform others about the dangers of these materials.

OBJECTIVE: Introduce students to the safe use, storage and transportation of hazardous materials.

TEACHER SUPPORT:

• Collaborate with a transportation, distribution or logilistics professional or a CTE transportation teacher.

STUDENT SUPPORT:

Provide links, examples, checklist and/or a template for students to use.

LEARNING EXTENSIONS:

- Invite a transportation, distribution or logilistics professional or a CTE transportation teacher to discuss the safe use, storage and transportation of hazardous materials.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of a transportation, distribution or logiistics professional.
- Identify and research a career within this pathway.

CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS

Career Studies: ES.M.8, ES.M.9, C.M.5

Reading and Writing: RI6.4

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HANDLE WITH CARE

Know how to use and store these hazardous wastes properly. Read labels carefully!

HOUSE

GARAGE

*Antifreeze * Motor oil

*Paint *Insect spray

*Weed killers

*Aerosol cans *Drain cleaners

*Overcleaners *Batteries

*Animal or rodent poison

*Flourescent lights

EXPLORATORY TASKS STUDENT SAMPLES

CLUSTER: Transportation, Distribution and Logistics

PATHWAY: Facility & Mobile Equipment Maintenance Pathway

All transportation requires equipment that must function as intended and whenever needed. Specialists in this pathway work to maintain, repair and service vehicles and transportation facilities.

EXPLORATORY TASK: How do you keep a vehicle running smoothly? Research the recommended maintenance for cars and trucks. Create maintenance guide that explains:

- What needs to be checked or replaced and when
- Function of each part
- Reason for checking or replacing

OBJECTIVE: Introduce students to the importance of vehicle maintenance to ensure the safe operation of a vehicle.

TEACHER SUPPORT:

• Collaborate with a transportation, distribution or logiistics professional or a CTE transportation teacher.

STUDENT SUPPORT:

• Provide links, examples, checklist and/or a template for students to use.

LEARNING EXTENSIONS:

- Invite a transportation maintenance professional or a CTE transportation teacher to discuss the importance of vehicle maintenance to ensure the safe operation of a vehicle.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of a transportation, distribution or logiistics professional.
- Identify and research a career within this pathway.

CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS

Career Studies: ES.M.8, ES.M.9, C.M.5

Reading and Writing: RI6.4

NOTE:

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Your Guide to Keep Your Car Running Smoothly

- ✓ Every 5,000 miles:
 - o change the oil and filter
 - o rotate the tires
- ✓ Every 30,000 miles, in addition:
 - o replace the air filter
 - O replace the cabin air filter
 - o flush the cooling system
- ✓ Every 60,000 miles, in addition:
 - o replace spark plugs
- ✓ Every 80,000 miles, in addition:
 - o inspect d ive belts, motor mounts and hoses
 - o look for fluid leaks
 - O listen for strange or unusual noises
- ✓ Every 90,000 miles, in addition:
 - inspect the timing belt and water pump







Is a Career in Transportation, Distribution & Logistics for Me?

Would you be interested in a career in Transportation, Distribution & Logistics? 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
Travel	X		
See well and have quick reflexes	l X		\$6
Solve mechanical problems			X
Design efficient processes			X
Anticipate needs and prepare to meet them			X
Drive or ride	X	19	
Move things one place to another		X	
PERSONAL QUALITIES THAT DESCRIBE ME	YES	NO	MAYBE
Realistic			X
Mechanical	V		
Coordinated		7	
Observant	1 %		
Planner	1 1		
SCHOOL SUBJECTS THAT INTEREST ME	YES	NO	MAYBE
Math		X	
Trade and industrial courses		/	X
Physical sciences	X		
Economics	1.		X.
Foreign language			X

Did you check YES most often? If so, continue to explore careers and opportunities in this cluster. And don't forget to continue 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.