

# INFOhio Career Exploration Unit



**Grade K-1**

**Standards:**

**Reading, Writing, Math,  
Social Studies, Science, Fine Arts,  
Career Connections**

## Getting Started with the Lesson

Welcome to INFOhio's Career Exploration Units. These units contain multiple lessons which use INFOhio's digital resources to help students learn, practice, and master key learning standards while learning more about career options. In this lesson, students Kindergarten and First Grade will learn more about jobs in the transportation industry.

By completing this lesson, your students will be able to practice some key technology skills, including:

- Click/Tap
- Scroll
- Drag and Drop
- Use a Video Player
- Use a Ruler

For more information on how to help your students practice technology skills visit [INFOhio Tech Skills for Online Testing](#).

If you have any questions or comments, please go to [support.infohio.org](http://support.infohio.org).

## How to Access INFOhio Resources

INFOhio's license agreements require us to make sure that only Ohio's PreK-12 students, their parents, and educators can use the digital learning content.

We use IP recognition, cookies, and geo-authentication to make it easy for you to use our resources. If our system can automatically recognize that you should have access, you probably don't need to log in with a username and password.

If our system can't automatically recognize that you should have access, you can log in with your INFOhio username and password. You can find the INFOhio username and password for your school by visiting the [INFOhio website](#) and clicking Get Password in the blue box at the bottom of the page.

## Best Practices for Digital Reading

Reading on a screen is different than reading print. The best practices in this guide were collected by the INFOhio Early Learning Task Force from journals, education publications, and research studies. Use these best practices with students of any age to help them become readers who can comprehend, analyze, and evaluate text on the screen or in a book.

- [Best Practices for Digital Reading](#)



### Career Education

Each Career Exploration Unit includes one lesson focusing on careers within the theme to help children discover the variety of jobs available, connect the classroom to real-world situations, and develop work-readiness skills such as teamwork, decision making, and problem solving.

The Things that Go Unit focuses on the Transportation Systems Career Cluster. This includes technical- and professional-level careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, and mobile equipment and facility maintenance.

Job focuses include pilot, train engineer, truck driver, flight attendant, air traffic controller, travel agent, bus driver, ticket agent, tugboat operator, ship captain and other transportation related careers.

### Career Connections ODE Career Pathways

The Ohio Department of Education has created many Career Pathways that offer an overview of the options available within a career cluster. Each pathway provides information on the education or training needed, outlook for the careers, and wages. Below are some Career Pathways that will be of interest to students interested in working with jobs in the transportation systems.

[Automotive Technology](#)

[Aviation](#)

[Diesel Driver](#)

[Diesel Mechanic](#)

[Freight Operations](#)

## Standards

The INFOhio Career Exploration Unit, Things That Go, aligns with these Ohio Learning Standards for Reading. See Extend the Learning for additional activities aligned to other content area standards. This lesson addresses Ohio Learning Standards for Kindergarten and Grade 1, but it is easily adapted for other grade levels.

### Anchor Standard

Integration of Knowledge and Ideas. 7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

### Reading Literature

ELA.RL.K.7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g. what moment in a story an illustration depicts).

ELA.RL.1.7. Use illustrations and details in a story to describe its characters, setting, or events. Reading Informational Text (Nonfiction)

ELA.RI.K.7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g. what person, place, thing, or idea in the text an illustration depicts).

ELA.RI.1.7. Use the illustrations and details in a text to describe its key ideas.

## Pretest

Display a large chart with three columns (Land - Air - Water). In a large group setting begin a discussion on how people and things are transported from one place to another by many different vehicles.

- Explain that there are three categories of transportation (air, land, water).
- Share images of different kinds of things that go (airplane, car, truck, motorcycle, train, sailboat, cruise ship, etc.) Use photographs, projected computer images or even toy vehicles.
- Ask students to identify if the “thing that goes” belongs in the air, land, or water category. Record the answers on a three-column chart.
- Tell the students that they will be reading about different things that go.

## Post Test

- Revisit the three-column chart created in the pretest discussion.

- Discuss the “things that go” that were included on the original chart. Ask the students if they can add new items to the three columns based on what they learned during their study of “Things That Go.” How do they know in which category to place the form of transportation? What picture clues are used to help make the decision?

## Lesson 1: Land Transportation



INFOhio provides access to this collection of eBooks at no cost for Ohio students, teachers, and parents. BookFlix features 141 pairs of fiction and nonfiction books, with popular titles such as *Click Clack Moo* and characters such as Curious George. Each themed pair includes games for reinforcement of reading skills, information about the author, and websites to enhance learning. Thirty-eight of the title pairs are also available in Spanish.

For this lesson, use the title search feature in BookFlix to find this pair:

Fiction: *I'm Fast* by Kate and Jim McMullan. Lexile Reading Level: N/A

Nonfiction: *Trains* by Mary Lindeen. Lexile Reading Level: 310.

You can access [BookFlix](#) using this link.

### Activity:

#### Read/Watch

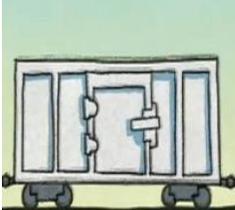
View/Read *I'm Fast* and read the nonfiction title *Trains*. Conduct this activity in a large group with selected images from the two books projected onto a whiteboard or screen. Discuss the illustrations (you can use the pause feature on *I'm Fast*) from the two books and have students share what they have learned about trains. You can also have students complete the activity alone using the "Things That Go: Land Transportation." (30-45 minutes)

### Differentiation

Turn the read-aloud feature on or off. Use the sound only if the student needs to have the text read aloud. For students who have difficulty, work one-on-one or in pairs.

## Things that Go: Land Transportation

View the video storybook *I'm Fast* and read the eBook *Trains* from BookFlix to complete this activity.

	<p>Carefully examine this picture to determine if it is a passenger train or a freight train? How did you decide what type of train it is and what clues did you use to make the decision?</p>
	<p>The train in <i>I'm Fast</i> is taking a load of freight to Chicago. One by one the different cars are loaded with different items. The first item loaded was lumber. What type of train carries the lumber? How did it get that name? What makes it different from the other cars? Use the picture to find clues about the train car.</p>
	<p>Use the picture to help you identify the train car and its contents. How is it different from the other cars? How does the color of the car tell you about its contents? Why does it have a heavy locked door?</p>
	<p>All of the cars on a train are connected. Examine the picture for clues about the job that this car does. What clues help you choose the job that this car does?</p>
	<p>In the story, this car was placed between the stack car holding the trucks, and the auto rack. What is it called? Can you name some of the items found inside the car? How is this car different from the other cars?</p>

## Assessment

The assessment can be completed individually or in a small or large group. Use the pictures to identify the correct train car and its job.



1. Which car could be used to transport cars from one place to another? What about the illustration tells you this?
2. Which car could be used to carry large coils of steel to a construction project? What tells you this?
3. Which car would be used to carry small pieces like coal or gravel? What about the illustration tells you this?
4. Which car is used to hold bricks used to build homes, offices, and other buildings? What about the illustration tells you this?
5. Which car could be used to carry large items that take up a lot of space? What tells you this?

Answers: 1. Auto Rack 2. Coil Car 3. Hopper 4. Gondola 5. Flat Car

Links for standards-based rubrics are listed below or create your own.

### [Iowa Core Standards Based Rubrics](#)

### [Assessments and Rubrics \(Kathy Schrock\)](#)

#### Read More About It

Collicutt, Paul. *This Care and This Train*.

Crews, Donald. *Freight Train and Truck*.

Floca, Brian. *Locomotive*.

Gibbons, Gail. *Trains and Trucks*.

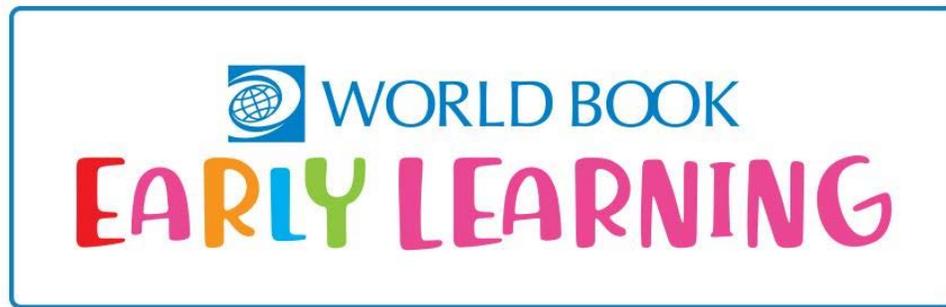
Rinker, Sherri Duskey. *Steam Train, Dream Train*.

Scarry, Richard. *Cars and Trucks and Things That Go*.

Siebert, Diane. *Truck Song*.

Van Dusen, Chris. *If I Built a Car*.

## Lesson 2: Air Transportation



INFOhio provides access to this collection of eBooks, videos, and educational games at no cost for Ohio students, teachers, and parents. World Book Early Learning offers a variety of eBooks on early learning concepts and nonfiction subjects, stories, activities, videos, and games for a media-rich learning experience.

For this lesson, scroll through the images until you find "On The Move." Click the Go button to learn more about exciting ways to travel.

You can access [World Book Early Learning](#) resource using this link.

### Activity

#### Read and Discuss

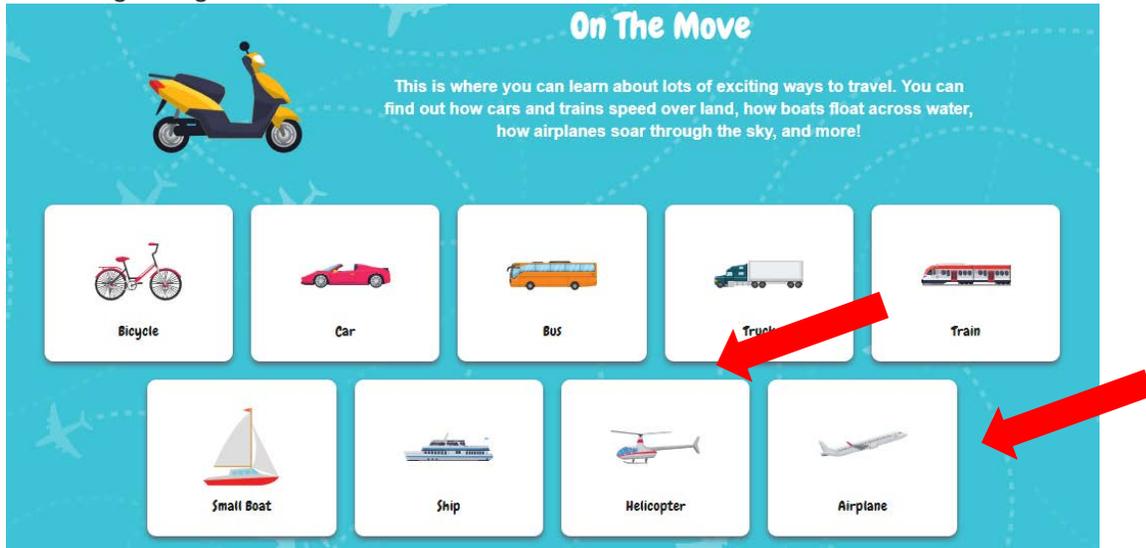
Go to [World Book Early Learning](#). Scroll through the images and click on "On the Move." Choose a type of air transportation, either the airplane or helicopter. Read the text to learn more details about air travel. Watch the short video clips and look at the pictures of transportation. Make a list of five words to describe air transportation. Then use the words to write a short descriptive paragraph or story about the "Things that Go" in the air. Use the attached sheet to help students in their reading. (45-90 minutes)

### Differentiation

Different learning styles are addressed in this activity with reading, photos, and videos. All are very brief and easy to use. Students can choose to click the video player button to activate the read-along feature. Students who need more practice can choose fewer words or can be asked only to identify words and not evaluate the most important ones.

## Things that Go: Air Transportation

Read about one of these types of air transportation, either the airplane or helicopter. After you have chosen, make a list of 5-10 words about it, and write a short paragraph about the “thing that goes” in the air.



5 words to describe the flying thing.

- 1.
- 2.
- 3.
- 4.
- 5.

Use the words to write a story about one of the things that flies. Include the five words that you listed to help tell more about it in your story.

## Assessment



It's a Fact! Answer the questions based on the illustration of a plane at the airport and the information that you read.

1. What type of airplane is shown in this picture? How do you know?
2. How do suitcases and cargo get from the airport to the plane?
3. What part of the plane helps it soar through the air?
4. Have you ever flown on a plane? If yes, when and where did you go? If no, would you like to fly on an airplane? Why?

Links for standards-based rubrics are listed below or create your own.

### [Iowa Core Standards Based Rubrics](#)

### [Assessments and Rubrics \(Kathy Schrock\)](#)

#### Read More About It

Barton, Byron. *Airport*.

Blackburn, Ken. *Kids' Paper Airplane Book*.

Crews, Donald. *Flying*.

Downs, Mike. *The Noisy Airplane Ride*.

Mitton, Tony. *Amazing Airplanes*

Munsch, Robert. *Angela's Airplane*.

Pallotta, Jerry. *The Jet Airplane Book*.

Scarry, Richard. *Richard Scarry's: A Day at the Airport*.

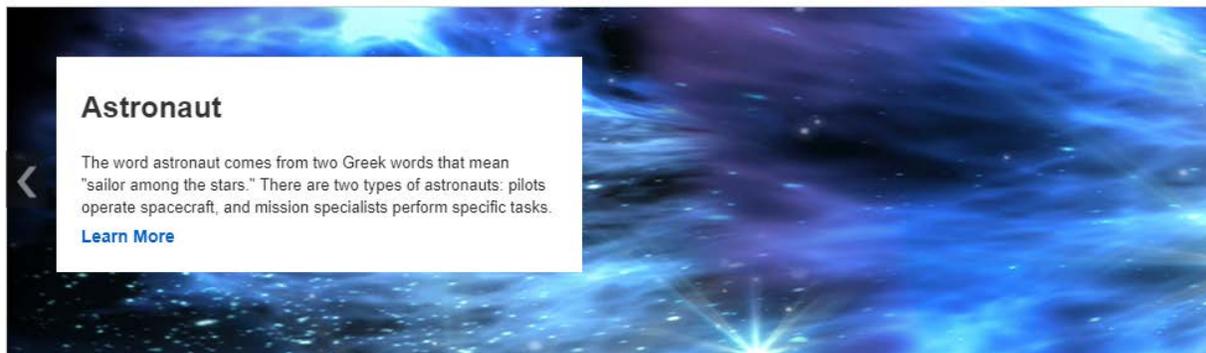
## Lesson 3: Water Transportation



Enter any words to find books, journals and more

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INFOhio provides access to this collection of educational and trade publications at no cost for Ohio students, teachers, and parents. EBSCO's Explora for Grades K-5 contains full-text articles from magazines, journals, and newspapers.

**Note on PDFs.** Many of the articles in Explora are available in PDF format, which is a scanned image of the original article including pictures. Whenever possible, the PDF format is preferred. If you do not already have it on your computer, you can download a free version of [Adobe Reader](#).

For this lesson use the article below:

[A Busy Day in Codfish Harbor](#). *Click*. January 2003. Lexile Reading Level: 900.

You can access [Explora for Grades K-5](#) by using this link.

### Activity

#### Read and Discuss

Boats come in all shapes and sizes. Some are used for fun and others are used for work. Share the article [A Busy Day in Codfish Harbor](#) with students by projecting it on a whiteboard or screen. Give each student a printed copy of the PDF of the article. Point out the different types of boats, their purpose, and how they are used for work. As you go over each page of the article, tell the students they are on a treasure hunt. Ask questions using the illustrations. Ask a text-supported question and then have the students use their printed copy to find the answer. The students can show everyone the answer using the projected article. Find sample questions and illustrations on the "Things that Go: Water Transportation" sheet. (30-60 minutes)

## Things that Go: Water Transportation



1



2



3



4

Write the number of the picture from the article "A Busy Day in Codfish Harbor" that can help answer these questions. This can be a group or individual activity.

\_\_\_\_\_ 1. "The Captain, the pilot and the helmsperson work together to get the ship where it needs to go." What is the job of the captain?

\_\_\_\_\_ 2. Barges do not have engines, so tugboats help move them along in the water. What do barges do?

\_\_\_\_\_ 3. The ro-ro (roll on, roll-off) container ship has a ramp that is used to move the large containers on and off the ship. Who can find the picture of the container ship? Can you name some things that might be found in the containers?

\_\_\_\_\_ 4. "A breakwater is a sea fence." Why is a breakwater important?

## Differentiation

The article is provided in two formats: HTML and PDF. If using the HTML, the text can be read aloud. By changing the settings, a large box pop ups on the screen as the text is read aloud. Click on the gear next to LISTEN to change the settings for enhanced visibility and pop-up. The PDF is in a visual format that can be projected to a white board, shared, and discussed with a large group or by individual students.

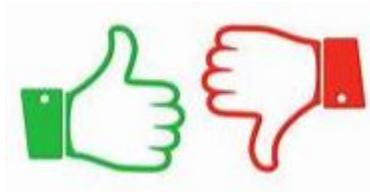
## Assessment

Use thumbs up (True) thumbs down (False) to answer the questions based on the Click news article.

Use the images from the article to help you find clues to answer the questions.

1. The captain is the person who is at the ship's steering wheel as it enters the harbor.
2. Sometimes little boats help big boats move along in the water.
3. The breakwater is a fence of rocks that keeps big waves out of the harbor.
4. Railroad ferries transport oil.
5. A tanker farm is a group of large tanks used to store oil, gas, or gasoline.

Answers: 1. False 2. True 3. True 4. False 5. True



Links for standards-based rubrics are listed below or create your own.

[Iowa Core Standards Based Rubrics](#)

[Assessments and Rubrics \(Kathy Schrock\)](#)

## Read More About It

Ansell, Willlits Dyer. *A Kid's Book on Boatbuilding.*

Crews, Donald. *Harbor and Sail Away.*

Demarest, Chris. *Ship.*

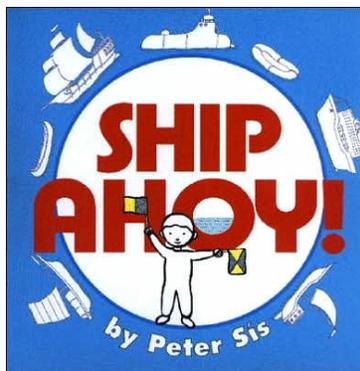
Gibbons, Gail. *Boat Book.*

Maestro, Betsy. *Big City Port and Ferryboat.*

Rand, Gloria. *Salty Dog.*

Rockwell, Anne. *Boats.*

Sis, Peter. *Ship Ahoy!*



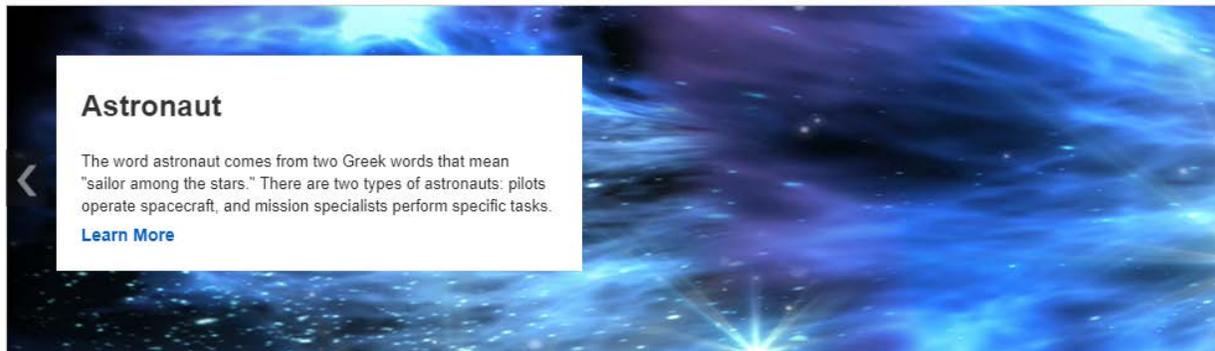
## Lesson 4: Careers in the Transportation System



Enter any words to find books, journals and more

Search

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INFOhio provides access to this collection of educational and trade publications at no cost for Ohio students, teachers, and parents. EBSCO's Explora for Grades PreK-5 contains full-text articles from magazines, journals, and newspapers.

**Note on PDFs.** Many of the articles in Explora are available in PDF format, which is a scanned image of the original article including pictures. Whenever possible, the PDF format is preferred. If you do not already have it on your computer, you can download a free version of [Adobe Reader](#).

This lesson will use these articles:

- [Train](#). *U.S. News and World Report*. March 2005. Lexile Reading Level: 930.
- [Airplane Pilot Shelby Van Zweedden](#). *Careers & Colleges*. Jan/Feb 2004. Lexile Reading Level: 760
- [Truck Driver](#). *Research Starter*. 2013. Lexile Reading Level: N/A

You can access [Explora for Grades PreK-5](#) by using this link.

### Activity

#### Read and Discuss

Do you wonder how your food gets to the supermarket or your favorite fashion arrives at the mall? Or how people get from one place to another with a minimum of time and effort? If so, then the world of transportation may be the career field for you. Read about the world of truck drivers, airline pilots, and railroad engineers to discover what it takes to get goods and people to their destination. Share the three articles with



students and work together to answer the questions. Students can fill in the answers on the “Things that Go: Careers in Transportation.” (30-90 minutes)

## Differentiation

The article is provided in two formats: HTML and PDF. If using the HTML, the text can be read aloud. By changing the settings, a large box pop ups on the screen as the text is read aloud. Click on the gear next to LISTEN to change the settings for enhanced visibility and pop-up. PDF is in a visual format that can be projected to a white board, shared, and discussed with a large group or by individual students.

## Things that Go: Careers in Transportation

	 Train (Lexile: 930)	 Airplane Pilot (Lexile 760)	 Truck Drivers: (Lexile: N/A)
What job does the person in the story do?			
What kind of training/education is needed for the job?			
What are some of the things a person does in this job?			
What are some of the other types of jobs in this field?			

## Assessment

Based on the information from the three articles that were shared, answer the questions. The assessment can be completed individually or in a small or large group. Circle all correct answers.

1. Which area of transportation does Shelby Van Zweeken work in?

Land                  Water                  Air

2. The article about the railroad mentions several different types of jobs. Circle the one that does not belong.

Signal operator                  Engineer                  Flight  
Attendant                  Conductor

3. Semi-truck drivers must have a CDL license.                  True                  False

4. Truck drivers work alone or in pairs.                  True                  False

5. On a passenger line, the conductor's job is to operate the locomotive.                  True                  False

Answers: 1. Air                  2. Flight attendant                  3. True                  4. True                  5. False

Links for standards-based rubrics are listed below or create your own.

[Iowa Core Standards Based Rubrics](#)

[Assessments and Rubrics \(Kathy Schrock\)](#)

## Ohio Learning Standards. Writing

Anchor Standard for Writing. Text Types and Purpose. 2. Write informative/explanatory texts to explain and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

ELA.W.K.2: Use a combination of drawing, dictating, and writing to compose informative/explanatory texts that explain what they are writing about and supply some information about the topic.

ELA.W.1.2: Write informative/explanatory texts that name a topic, supply some facts about the topic, and provide some sense of closure.

**Extension Lesson:** Truckers have their own special way of talking to each other. Read the article: [It's Just the Way We Talk](#). From *Fun for Kidz*. (Sep/Oct 2013. Lexile: N/A.) If you could create a radio handle (name), what would it be? Why did you choose that name? How does it tell the listener something about you? Using some of the trucker talk from the article, write or tell what you might see on your trip down the highway. Draw pictures to illustrate your trucker's drive down the highway. (This would be a good large or small group exercise.) (30-90 minutes)

## Ohio Learning Standards. Math.

Measurement and Data

Grade K: 1. Describe and compare measurable attributes.

Grade 1: 1. Measure lengths indirectly and iterating length units.

Grade 1: 4. Represent and interpret data. Extension Lesson: How Far Does It Go? Conduct a simple experiment using paper airplanes.

**Extension Lesson:** Show the students how to fold a simple paper airplane and launch it in the classroom. Divide the students into groups of three or four and have each student make a paper airplane. Ask each child in the group to fly their airplane while another group member measures the distance and records it on a chart. After each group member has flown their plane, they work together to create a simple graph of the data about the distances. Share the group graph with the class. (30-45 minutes).

## Ohio Learning Standards. Social Studies

Geography Strand. Topic: Spatial Thinking and Skills

Grade K: Content Statement: 6. Models and maps represent places.

Grade 1: Content Statement: Maps can be used to locate and identify places.

**Extension Lesson:** In *I'm Fast*, the train races the car across the country to reach Chicago. Give each student a blank map of the United States. Project a large image of the map and identify the location of Sacramento, California, and Chicago, Illinois. Be sure to introduce and discuss the term "legend" with the students. A legend can indicate things such as roads, parks, or water. In this case it shows how to measure the distance between locations. Have students mark the location of both cities in the story and place a dot for where they live on their blank maps. Then have students trace the train's journey across the country from Sacramento, California, to Chicago, Illinois. Use a ruler and the legend to measure the distance that the train and car traveled. Now draw a path from your house to Chicago and a second path from home to Sacramento. Measure the distances and compile the results in a simple chart.

This activity can be done as group or individual project. Find outline maps in [World Books Kids](#) by clicking Maps and More at the bottom of the page. Select Outline Maps and Flags and click on the map of the United States. (45-120 minutes)

### **Ohio Learning Standards. Science.**

Physical Science Strand. Topic: Properties of Everyday Objects and Materials

Grade K: Content Statement: Objects and materials can be sorted and described by their properties.

Grade 1: Content Statement: Properties of objects and materials can change.

**Extension Lesson:** Sink or Float! Design and build tinfoil boats and test the designs to see how many pennies you can load in your boat before it sinks. Use the [Float My Boat](#) sheet from the PBS Kids program Fetch to build your boat and to record your results. (This would be a good small group exercise.) (30-60 minutes)

### **Ohio Learning Standards. Fine Arts Standards.**

Visual Arts – Producing/Performing (PR)

Grade K: Content Statement: 2PR Generate ideas and images for artwork based on observation, memory, imagination, and experience.

Grade 1: Content Statement: 3PR Explore and use a range of subject matter to create original works of art.

**Extension Lesson:** If I Built a Cool Train, Plane, Boat, or other vehicle. Land – air – water. Things that go come in all sizes and shapes. Now it is your turn to draw your own Cool Vehicle. Use different shapes to create your cool vehicle. Squares can be the body. Circles are the windows. Does it fly? Can it float? Does it have wheels or run on a track? Create a drawing of your version of a "cool" thing that goes. Have each student write one or two sentences about their cool vehicle. Use the drawings and writings to

create a class story about cool vehicles. This activity is best conducted in two sessions. (30-90 minutes)

**Additional Resources:**

- [INFOhio Educator Tools](#)

For additional assessments, instructional strategies and resources, and cross curricular connections by standard, go to INFOhio's Educator Tools.

- [INFOhio Pinterest](#)

Looking for more resources about "Things That Go" Check out INFOhio's Pinterest board.