

ECONKIDS

EXPLORE THE CHILDREN'S MUSEUM!

A GRADE 3-5 UNIT OF STUDY



The Children's Museum
of Indianapolis

Acknowledgements/Information About The Children's Museum

The Children's Museum of Indianapolis wishes to acknowledge the assistance of the following people in the development of this unit of study:

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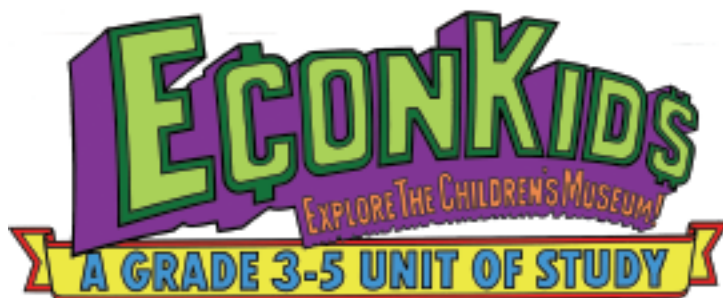
COVER:

Tim Campbell, original illustration for The Children's Museum of Indianapolis
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The Children's Museum of Indianapolis

The Children's Museum of Indianapolis is a nonprofit institution dedicated to providing extraordinary learning experiences for children and families. It is one of the largest children's museums in the world and serves people across Indiana as well as visitors from other states and nations. The museum provides special programs and guided experiences for students as well as teaching materials and professional development opportunities for teachers. Field trips to the museum can be arranged by calling (317) 334-4000 or (800) 820-6214. Visit Just for Teachers at The Children's Museum Web site: www.childrensmuseum.org.





Fun, Fact-Finding and Personal Finance

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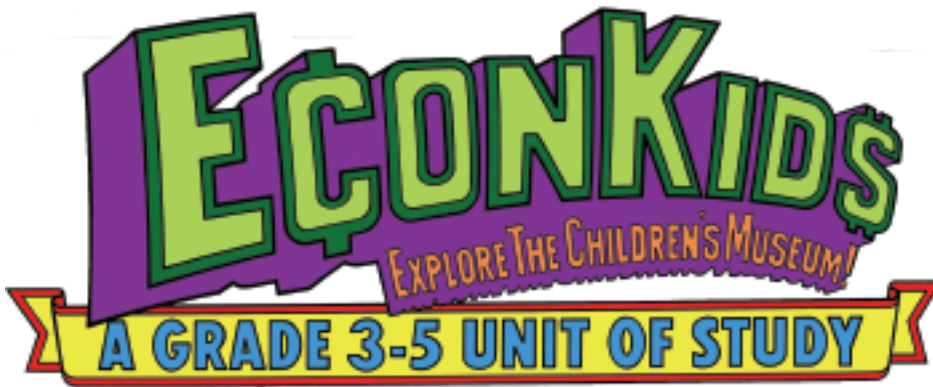
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Enduring Idea

Museums are an important community resource where students can investigate economic concepts and apply them to their own lives.

Museums enrich the community by providing unique cultural and educational opportunities. Museums also play a significant role in economic life. Goods and services are produced, distributed and consumed all around us, even in museums. For students, any trip to a museum can be an economics learning experience. At the same time they can engage in active learning in other subject areas. In this unit of study, students follow the adventures of the **EconKids** as they go on an economics fact-finding mission.

What Will Students Learn?

Indiana's Academic Standards

Lessons in this unit are multidisciplinary and help students to achieve standards in:

- Social Studies
- Language Arts
- Math

Economic concepts highlighted in this unit

- budgeting and personal finance
- goods and services
- interdependence
- opportunity cost
- philanthropy
- productive resources (natural, human and capital)
- profit
- scarcity
- specialization

What's Ahead?

Lesson 1

Imagine a Museum

Students learn about the roles museums play in the economic life of the community.

Lesson 2

Museumworks

Students plan a budget and take a study trip to a museum to learn about museum jobs and the tasks involved in creating an exhibit.

Lesson 3

Common Sense

Students learn how people in the community use time, treasure and talent for the common good through philanthropy and volunteerism.

Culminating Experience

The Mini-Museum

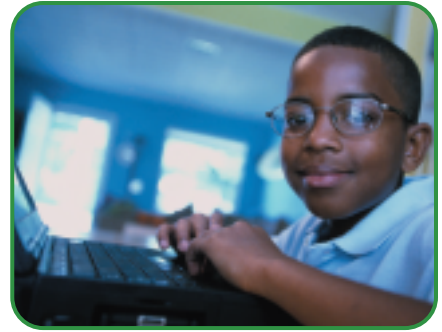
Students make economic decisions about how to gather and use resources as they create a mini-museum in the classroom.

What Will Students Be Able to Do?

Unit Goals

Students will:

- Explain how the museum benefits the community.
- Examine the economic impact of the museum on the community.
- Identify some of the natural, capital and human resources used by museums.
- Identify different types of goods and services produced by museums.
- Determine how specialization and interdependence relate to the various jobs and professions practiced in museums.
- Learn how to plan and make age-appropriate personal financial decisions.
- Give examples of scarcity and opportunity cost in everyday life.
- Examine the role of philanthropists and volunteers in the community.
- Increase vocabulary, reading, writing and research skills.



Museum Links

There are opportunities throughout the museum for students to find economics at work. Evidence of economic activity is everywhere. Two examples are the box office, where admissions are paid, and the museum store, where goods are sold and visitors make economic decisions. A variety of exhibits demonstrates how people in other times made a living and used resources in the past. Museum artifacts give clues about the different objects that were used as money in other times and places and how people trade for goods and services around the world. Explore a little more deeply to find behind-the-scenes evidence of museum jobs and professions. There is also evidence of scarcity and opportunity cost in the museum. Even though museums seem large, space is scarce. Decisions have to be made about which exhibits to develop and how large they can be. Space and resources that are used for one exhibit cannot be used for another. Encourage students to explore economic concepts as they engage in research and inquiry. Log on to the museum Web site at www.childrensmuseum.org. You can also visit the **infoZone**, a branch of the Indianapolis-Marion County Public Library at **The Children's Museum of Indianapolis**.

Getting Started

Classroom Environment

This unit of study is designed to complement other economics learning experiences in your classroom, particularly those that integrate economics into daily life at school. In this case, a museum study trip can become an additional opportunity to explore the world of everyday economics. Set up learning centers and reinforce economic concepts with everyday examples, posters, calendars and games. (For materials, see the Web sites of the Indiana Council for Economic Education, www.econed-in.org, and the National Council for Economic Education, www.ncee.net/4.) Help students create individual “word accounts” where they can deposit the new vocabulary words they will learn. To spark students’ interest in the trip, decorate the classroom with museum posters of different types. Let students know that they will be investigating museums to determine how they might create their own classroom mini-museum as a special project. Introduce students to the **EconKids**, cartoon-hero investigators who search for economics concepts wherever they

go. They are “Bud Budget,” “Penny Saver,” “Calvin Cash” and “Dollar Dog.” Their motto is “Economics Is Everywhere!” The Econ Kids can be used to inspire a variety of multidisciplinary learning activities in social studies, language arts and math.

Family Connections

Let families know well in advance that your class will be visiting the museum and students will be focusing on economics concepts while they are there. As they plan for the trip, students will be learning to use their time and other resources wisely while they use their skills in language arts and math. Encourage students to talk with their families about how they plan for a family trip to a museum or other destination. Some families may want to discuss their favorite museum experiences and effective ways to use time and money. This is an opportunity to discuss examples of scarcity and economic trade-offs at home. Some family members may want to participate in the museum visit as chaperones or contribute to the collection of artifacts for the classroom mini-museum.

Lesson 1 Imagine a Museum

Use the excitement of a future museum visit as an economics learning opportunity.

In this lesson students research and examine the roles a museum plays in the economic life of the community, and carry out group and individual planning for a museum trip.



The Children's Museum of Indianapolis.

You will need ...

Materials:

- EconKids cartoons — Transparencies 1 and 2, pages 12 and 13
- Overhead projector
- Flip chart paper or chalkboard
- EconKids Museum Fact Finder — (Student Handouts/Transparency 3), page 14
- EconKids Fun on a Budget handout, page 15



Time

Four to five class periods.

Focus Questions

- What is a museum?
- How does a museum benefit the community?
- What goods and services does a museum provide?
- What are the different ways museums make money to operate?
- How is a museum like a business? How is it different?
- What are the costs and benefits of visiting a museum?
- How can I use my resources wisely?

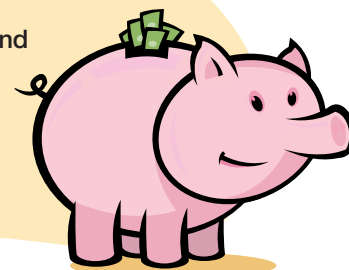
Objectives

This lesson will enable students to:

- Increase their economics vocabulary.
- Research the economic activities of different types of museums.
- Identify the goods and services provided by museums.
- Consider the different types of economic benefits museums provide to a community.
- Identify the monetary costs, opportunity costs and benefits of a visit to a museum.
- Develop a plan, including a personal budget, for a school trip to a museum.

Word Account

- | | |
|----------------------|--------------------------|
| ● benefits | ● nonprofit |
| ● budget | ● opportunity cost |
| ● costs | ● productive resources — |
| ● funding | natural, human and |
| ● goods and services | capital |
| ● income | ● profit |
| ● museum | ● scarcity |



Experience 1

Museum Fact Finders

Have students research a variety of museums to find out what kinds of goods and services they provide, what resources they use, how they operate and how they benefit the community. This experience will take approximately three class periods.



Penny Saver

Academic Standards

Social Studies

Standard 4 — Economics (3.4.4, 3.4.5, 4.4.1, 4.4.8, 4.4.9)

Language Arts

Standard 2 — Reading Comprehension (3.2.1, 3.2.2, 4.2.1, 4.2.2, 5.2.1)

Standard 4 — Writing Process (3.4.4, 4.4.7, 5.4.5)

Standard 7 — Listening and Speaking (3.7.8, 4.7.2, 5.7.5)

A **service** is an action someone does for someone else.



Calvin Cash

Procedures

Part 1

- Ask students to think about the economic activities that are part of their own lives. Students may think of things that they want to buy and ways of earning money.
- Help students think of the resources that are needed to produce the goods and services they use. Explain that people have to make decisions about how to use scarce resources on a daily basis. Discuss with students some of the economic choices they have made recently and ask them to consider the roles they play in the economy.
- Have students give examples of economic activities taking place in the school. For example, **goods** like school clothes and supplies are being used. People are providing **services**, such as teaching, cleaning the school and serving lunches.
- Help students identify some of resources that are being used to produce these goods and services. For example, wood from forests is one of the **natural resources** used to make paper for school supplies. The pots and pans in the school cafeteria are **capital resources** used to produce school lunches. **Human resources** are used to provide the labor to produce and serve the lunches.
- Explain that people everywhere are involved in economic activities and have to make decisions about how to use scarce resources on a daily basis. Discuss with students some of the economic choices they have made recently.



Dollar Dog

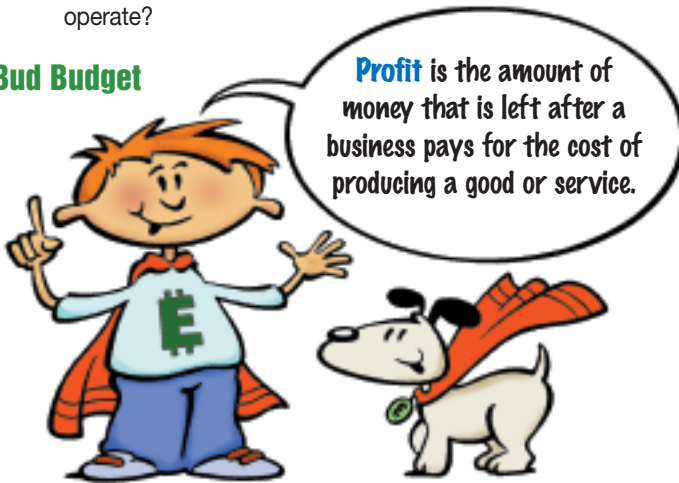
Procedures continued on the next page.

- Introduce students to the idea of taking a trip to a museum. Place the **EconKids** cartoons (Transparencies 1 and 2) on the overhead projector. Ask students if they think the EconKids will find any evidence of economic activity in a museum. Make a list of the activities students suggest on the chalkboard.
- Help students think of a museum as part of the economy by discussing the questions below.
 - What is a museum? What do you usually find inside?
 - How does a museum benefit the community?
 - What kinds of goods and services does a museum provide? What kinds of goods and services does it use?
 - What productive resources (natural, human and capital) does it use?
 - What does a museum need to operate?
- Where does it get the **funding** (money) that it needs?
- Is a museum like a business? Why or why not?
- Are all museums the same? Are some museums more like a business than others?
- Leave the answers to questions open and ask students how the EconKids might investigate these questions. Where would they look for answers?
- Students will probably suggest using the Internet as a research tool. Review rules and tips for using the Internet and divide class into teams of two to three students to carry out research.
- Assign each group one museum to investigate. You may want students to use the list of Indiana museum Web sites on page 11 or have students expand their online search to museums in other parts of the country.

Part 2

- Give each team a copy of the **Museum Fact Finder** handout. Before teams begin their research, discuss strategies for gathering information from a Web site by using the organizational features of a home page. Use **The Children's Museum** Web site as an example: **www.childrensmuseum.org**.
- Students will find that they need to click on many different areas of a museum's Web site in order to find the information they need. For example: Teams may find information for their Fact Finder under the titles "General Information," "About the Museum," "Planning Your Visit," "Membership," "Museum Store," "Donors," or "Sponsors." Discuss titles like these and ask students to predict what kinds of information they might find under each.
- Assist teams as they explore a museum Web site and read for specific information. Have them use the **Museum Fact Finder** to organize and take notes.
- You may want to have the entire class focus on one museum and have the teams investigate the various aspects of that museum or you might have each team examine a different museum. Another alternative might be to have teams explore one aspect (such as "donors") of several museums and then compare their information.

Bud Budget



For Profit and Nonprofit Organizations

The major difference between businesses that operate **for profit** and **nonprofit** organizations is in the way revenue is used. Both for profit businesses and nonprofit organizations can sell goods, charge admission and do other things that generate revenue. For profit organizations are free to use their profits in a variety of ways, but profits are subject to taxation. A nonprofit organization must be recognized as such by the state. To receive this designation, the organization must serve a useful community or educational purpose and must reinvest all of its revenue into organizational activities and operations. The revenues of a nonprofit organization usually are not taxed.

Museums for Fun and Nonprofit

How is a museum similar to and different from a business? There are many different types of museums. Some really are businesses. They are privately owned, provide goods and services for a fee and attempt to make a profit. This is the case with the many small roadside museums that you find along our nation's highways.

Most museums, however, are not intended to generate a profit. They fulfill an educational purpose and receive funding from the community in a variety of ways. Some museums are supported by taxes and are among the goods and services provided by national, state or local government. This is the case with the Indiana State Museum. Other museums are nonprofit organizations within the private sector. **The Children's Museum of Indianapolis**, for example, is supported primarily by donations from businesses, corporations and individuals. It also makes some money by charging for admission and memberships and by selling goods in its store. Like most museums, it is not intended to make a profit. Any money the museum makes is used to support its programs and pay for its operating costs.

Part 3

- Give teams time to complete research and prepare to report their findings. When teams are ready, place the blank **EconKids Museum Fact Finder** (Transparency 3) on the overhead. Teams can use the transparency as a prop as they discuss what they have learned from their research.

Follow-up Discussion:

- After the team reports, reinforce economics concepts by helping students make a list on the chalkboard of the goods and services provided by museums. For example, students may learn that museums sell goods like toys and souvenirs in their gift stores. They may provide the services of guides or interpreters to help visitors understand exhibits.
- Ask students to identify the resources used to produce these goods and services. For example, have students identify the natural, human and capital resources needed to produce the food in the museum restaurant or snack shop.
- Discuss the different ways museums make money. Ask if any of the teams investigated museums that receive money from taxes. How could they tell? Explain that some museums are part of the goods and services provided by government.
- Ask students to consider how a museum is similar to and different from a business. Discuss the idea that businesses are intended to make a **profit** and have students explain what the word means. What are the different ways business owners might use their profit?
- Introduce the idea that most museums are **nonprofit** organizations. This means that any money they make must be used to pay for the costs of operating the museum. A nonprofit organization also has to provide some important benefit to the community. After they pay for the cost of operating, for profit organizations can use the money they make as they wish.
- Ask students to identify some of the costs of operating a museum. They may need help to think of costs such as electricity bills and salaries for employees.
- Ask students if they would like to work for a nonprofit organization, such as a museum. Why or why not?

Assessment

Fun on a Budget

Assess what students have learned by evaluating the **EconKids Museum Fact Finder** handout teams completed in Part 1 and the team oral report in Part 3. Evaluation criteria: Each team will complete the handout using good note-taking strategies. Students will demonstrate the ability to use online resources and navigate a Web site to find information. In reading informational text online students will locate, organize and record significant ideas and details. Team members will make an oral report on their findings using the **Museum Fact Finder** as a prop as they summarize main ideas and give examples.

Museum Mission and Contributions — The Children’s Museum of Indianapolis

Mission: To create extraordinary learning experiences that have the power to transform the lives of children and families.

The Children’s Museum inspires people of all ages to learn in ways that are unique and personal. It enables children and families to discover other times and cultures, explore science and technology and engage in the arts. The museum complements other community institutions, such as schools and libraries, by providing direct, interactive experiences. In this way, the museum enriches the lives of individuals and strengthens the cultural foundations of the community.

In addition to making educational and cultural contributions to the community, the museum plays an important economic role. Results of a 2002 study by Dr. Mark Rosentraub, School of Urban Affairs at Cleveland State University, indicate that **The Children’s Museum of Indianapolis** is making a significant impact on the economy of central Indiana by providing jobs, attracting tourism and contributing to education and community development.

Contributions to the local economy:

- The museum directly provides full-time employment for more than 200 people and uses the services of approximately 1,500 volunteers each year.
- The museum spends most of its operating budget locally and uses supplies and services purchased primarily from local businesses. This also helps to create and maintain jobs in the community.
- More than half of the museum’s 1 million yearly visitors are from outside the Indianapolis metropolitan area. More than 250,000 of these visitors booked rooms in area hotels. This exceeds the number of bookings generated by many professional sports teams.
- Several annual free-admission days and other programs allow families from all economic backgrounds to visit the museum and take part in its programs. The museum provides cost-reduced admission to all students from public and private schools. The total value of these free visits and the reduced admission is \$5,412,127 per year.
- The museum’s presence and its work with the city and neighborhood associations are helping to improve housing for near-downtown residents, enhance real estate values and encourage redevelopment.

Economic Contribution — 2001

Operations	\$20,529,335
Free Admission	3,141,931
School Admissions	2,270,196
Capital Expenditures	1,444,000
Tourist Expenditures	18,342,480
Total Economic Contribution	\$45,727,942

Experience 2

Fun on a Budget

Students consider costs and benefits of a museum visit and plan a personal budget for their museum experience. This experience will take approximately two class periods.

When you make a decision, the most valuable alternative you give up is your **opportunity cost**.



Calvin Cash

Academic Standards

Social Studies
Standard 4 — Economics (3.4.8, 4.4.10, 5.4.8)

Mathematics
Standard 2 — Computation (3.2.1, 3.2.2, 3.2.5, 4.2.2, 4.2.4, 4.2.10, 5.2.1, 5.2.5)
Standard 3 — Algebra (3.3.6, 4.3.6, 4.3.7)

Procedures

Part I

- After students have visited the Web sites of different museums help them choose one that they want to visit. Have them research questions they would need to answer in order to plan a class trip. For example: What will they be able to see and do at the museum? How far away is it? What are the museum hours? How much is admission? Can you buy something to eat?
- Use the chalkboard or a large sheet of paper to construct a simple chart with three columns and the headings: Benefits, Cost in Dollars and Opportunity Cost. (See chart below.)
- Ask students to suggest the various personal **benefits** of a trip to the museum and list them on the chart.
- Have students think of the **monetary costs** of a museum visit and list them on the chart. Costs might include admissions, lunches, hiring a bus driver and buying gasoline for the bus.
- In addition to the cost in dollars, help students consider the **opportunity cost** of a visit. What will they have to give up in order to take the trip? For example, if the class uses time for a trip, that time isn't available for other activities.
- Help students think about examples of opportunity cost in their daily lives. Ask students: "If you had enough money to buy only one thing, a

Dog Food?
Chew Toy? Treats?
It's so hard to choose!



Dollar Dog

comic book, a bag of candy or an ice cream cone, how would you decide?" Students will probably select the item they like the best. Explain that their second favorite item, the one that they had to give up in order to buy their favorite, is their opportunity cost.

Procedures continued on the next page.

Benefits	Cost in Dollars	Opportunity Cost
Fun Learning Something new Exciting Time with friends	Admission Bus Driver Gasoline Lunches	Time to spend on schoolwork Other field trips the class could take Money that could be spent for classroom materials

- Help students use their math skills to determine how much money it will cost for the class to visit the museum. For example, if admission costs \$3 per student, how much would admission cost for 30 students to visit the museum?
- Using the information on admission costs, help students write the problem using simple sentences. For example: "Admission costs \$3 per student. How much would admission cost for 30 students to visit the museum?"
- Have students describe how they would solve the problem using repeated addition or simple multiplication. Similar problems can be created to determine the cost of gasoline for the trip. These problems will also provide practice in adding and subtracting decimals.
- When the costs have been determined, write them on the chart and have students add to find the total. (Fifth-graders should be able to divide the total costs by the number of students to determine the cost per student.)

Assessment Fun on a Budget

Students will use complete sentences to write simple mathematics problems. They will compute answers to problems using repeated addition or multiplication to determine the monetary cost of a class visit. Each student will complete the handout using a specific amount of income to develop a personal budget for the museum trip. To check economic learning, have each student use a concept, such as scarcity or opportunity cost, to explain why a budget is important.

Part 2

- Now that they have a better understanding of the costs involved, ask students to take a new look at the chart. Do they think the benefits of visiting the museum outweigh the monetary costs and the opportunity costs? Why or why not? What could be done to reduce monetary costs?
- Ask students if they think that their families have to consider similar questions when they plan for family fun. What does the chart suggest about how they should use their time while they are at the museum?
- Ask students why people have to make choices about how they use their time and money. Explain that resources of all types are limited compared to people's wants. This condition is called **scarcity**. Because of scarcity, people have to choose carefully. One of the ways to make wise choices about how to use your money is to make a spending and saving plan called a **budget**.
- Introduce the **Fun on a Budget** handout. Explain to students that the budget will help them plan how they will use individual resources during their museum visit.
- Provide students with the **Fun on a Budget** handout on page 15. Have students complete their budgets in pencil.
- Review guidelines for creating a good budget and allow students to make adjustments if necessary. For example, a good budget should be based on income. You should not plan to spend more money than you make. Some income should be placed in savings for things you want in the future.
- Help students understand that a budget helps them to consider opportunity cost and make good decisions about how to manage their money. Discuss how people use money for spending, saving and donating or sharing with others.

Bonus Extending Activities:

- Check newspapers to see if any changes are taking place in museums in your community. Have students gather information about a proposed change and consider the economic impact on the community. The proposed change might involve the opening of a new exhibit or building a new addition to a museum. (Social Studies Standard 4 — Economics 3.4.9)
- Ask students to imagine a world without money. Have them try doing their budgets using something that was used as money in the past, such as shells or beaver pelts. Discuss the functions of money and ask students how money helps to plan spending and saving. (Social Studies Standard 4 — Economics 4.4.6)
- As part of planning for the museum visit, ask students what personal items they want to take on the trip. Help them to understand that some items are inappropriate or inconvenient to bring. Then ask them to imagine that they can take only one item because space is limited. How will they choose? Use this activity to help them consider scarcity and opportunity cost in their daily lives. (Social Studies Standard 4 — Economics 2.4.5, 3.4.8)

Tips for Teacher

This lesson provides a new perspective on museums as part of the economy. The idea that museums are producers and consumers of goods and services may be new even for some adults. Most families plan how to use their resources when they visit a museum but may not think of museums as places that affect the economic life of the community as a whole.

Lesson experiences give students the opportunity to learn that everyone makes economic decisions regardless of the setting. While most schools have guidelines for field trips that all personnel must follow, it is important to help students understand the types of decisions that have to be made and allow them to be involved in planning the trip to the extent that is appropriate.

As you help students develop a budget, keep in mind that families have different practices regarding the use of money by children. Some may not be able or may not want to provide spending money for a child's field trip. Other families may provide a considerable amount. For this reason, the **Fun on a Budget** handout provides a sample budget with amounts of income from different sources, such as an allowance or special chores. Have students develop a budget using their own figures but help them consider realistic amounts to budget. After the museum visit, ask the students to review the plans they made before the trip. Did having a budget, even if it involved hypothetical amounts, help them make better choices? Did they use both their time and money well?

Museum Links

The Children's Museum of Indianapolis Web site has a wealth of information about the museum. Students can find museum features and exhibits, background on museum operations and information about planning a visit, including admission costs. Have students explore the site and click on areas such as "About the Museum," and "Planning Your Visit." They will get a good idea of the benefits of a museum trip by clicking on "Just for Kids." Visit the site at www.childrensmuseum.org

Indiana Museum Web Sites

- The Children's Museum of Indianapolis — www.childrensmuseum.org
- Colonel Eli Lilly Civil War Museum — www.in.gov/iwm/civilwar/
- Conner Prairie — www.connerprairie.org
- Crispus Attucks Museum — www.crispusattucksmuseum.ips.k12.in.us/
- The Eiteljorg Museum of Native Americans and Western Art — www.eiteljorg.org
- Grissom Air Museum State Historic Site — www.grissomair-museum.com/
- Hooks American Drugstore Museum — www.americandrugstoremuseum.org
- Indiana Basketball Hall of Fame — www.hoopshall.com/
- Indiana Historical Society — www.indianahistory.org/
- Indiana Medical History Museum — www.imhm.org/
- Indiana Motor Speedway Hall of Fame — <http://ims.brickyard.com>
- Indiana Transportation Museum — <http://itm.org>
- Indiana State Museum — www.in.gov/ism
- Indianapolis Museum of Art — www.ima-art.org
- Museum of Miniature Houses and Other Collections — www.museumofminiature.org
- National Art Museum of Sport at University Place-IUPUI — www.namos.iupui.edu
- National New York Central Railroad Museum — www.nycrrmuseum.org

INTRODUCING THE E $\text{\textcircled{E}}$ CONKID $\text{\textcircled{S}}$

HI, I'M CALVIN CASH ...

... MY NAME IS PENNY SAVER ...

... THEY CALL ME BUD BUDGET ...

... AND I'M DOLLAR DOG. WE'RE HERE TO PROVE THAT ECONOMICS IS EVERYWHERE!



EconKids Museum Fact Finder

Team Members: _____

Museum Name: _____

Location: _____



Goods:	Services:



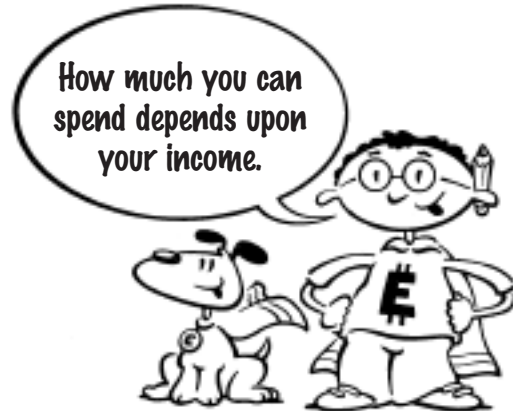
Jobs:	Training/Education:

Where does the museum get funding to operate?

How does the museum benefit the community?

EconKids Fun on a Budget

Name: _____



Museum Visit Budget

	SAMPLE	MY BUDGET
Where will my money come from?		
Income:		
Jobs or special chores	\$10.00	\$ _____
Allowance	5.00	_____
Gifts	5.00	_____
Total Income	\$20.00	_____
How will I use my money?		
Spending:		
Snacks	\$5.00	\$ _____
Museum store	12.00	_____
Other (Carousel rides)	1.00	_____
Total Spending	\$18.00	\$ _____
Savings:	\$2.00	\$ _____
Total Spending + Savings =	\$20.00	\$ _____



Lesson 2 Museumworks

During an actual study trip to a museum, students examine the “nuts and bolts” of creating an exhibit and meet some of the people who make the museum work.



The Children's Museum of Indianapolis.

Museum workers move an Indy race car to create a new exhibit.

You will need ...

Materials:

- EconKids Museum Nuts and Bolts Journal, pages 21 – 22
- People Profiles handout, pages 23 – 24
- My Job Profile handout, page 25



Time

Three class periods and one day for a museum visit.

Focus Questions

- What should you do to be a good observer?
- What evidence of human, natural and capital resources can you find in a museum exhibit?
- What evidence of goods and services can you find?
- How do people in museums depend upon each other for goods and services?
- What types of jobs are related to these goods and services?
- How does specializing in a particular type of job help people produce more?
- What types of education and training are needed to do each of these jobs?
- What kind of a museum job would you like to do?

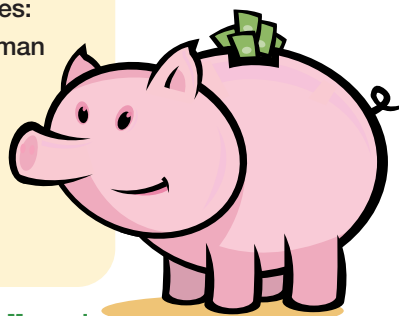
Objectives

This lesson will enable students to:

- Examine at least one exhibit in depth and take notes of their observations.
- Identify the different types of goods and services and productive resources that are involved in developing a museum exhibit.
- Explain the role of artifacts and specimens in museum exhibits.
- Analyze specific exhibits to identify the different types of jobs involved.
- Read profiles of different museum workers to identify the skills, education and training needed for their jobs.
- Explain how specializing in specific jobs helps people to be more productive.
- Use Web sites to research and select museum jobs that they would like to do and write their own profiles.

Word Account

- artifact
- collection
- collector
- curator
- electrician
- exhibit
- exhibit designer
- exhibit developer
- gallery
- graphic artist
- interdependence
- painter
- productive resources: natural, capital, human
- productivity
- profile
- sculptor
- specialization
- specimen



Experience 1

Museum Nuts and Bolts

On a trip to a museum, students choose an exhibit to examine closely and use the **EconKids Museum Nuts and Bolts Journal** to record their observations of the resources, goods and services involved in building an exhibit. This experience will require two class periods and one day at the museum.

Academic Standards

Social Studies

Standard 4 — Economics (3.4.4, 4.4.1, 5.4.4)

Standard 5 — Individuals, Society and Culture (3.5.5)

Language Arts

Standard 4 — Writing Process (3.4.1, 4.4.1, 5.4.6)

Standard 5 — Writing Applications (3.5.2, 3.5.5, 4.5.6, 5.5.6)

Procedures

Part 1 — Pre-Visit Preparation

- Before beginning the discussion, create a chart with three columns: Natural resources, capital resources and human resources. Use the chart to record student ideas during discussion. Students will be able to add to the chart after their museum visit.
- Ask students to consider their research and think about the kinds of things they might find in a museum.
- Ask them to identify which of these things involve the use of natural resources. (**Natural resources** are found in nature and are used to produce goods and services. They might include wood from forests, water or minerals, such as stone.)
- Have students suggest some **natural resources** being used in the school. Ask: "How do you think resources like these might be used in a museum?"
- Explain that there are other kinds of resources. **Capital resources** are goods, like a hammer or a computer, that are used to produce other goods and services.
- Discuss different examples of capital resources in the school. Examples might include computers, copy machines, tools and utensils used to produce school lunches. Ask students: What kinds of capital resources do you think are used in a museum?
- Ask students to speculate about the kinds of jobs people do in a museum. Explain that **human resources** relate to the work of people who do jobs.
- To learn more about museum jobs, give each student a copy of **Museum People Profiles**, pages 23 – 24. Place students in pairs and give them time to read the profiles carefully.

Part 2 — Pre-Visit Preparation

- Have students use the museum Web site to find maps and descriptions of exhibits.
- Review the benefits that students expect to gain from the trip. Remind students about what they learned about scarcity in Lesson 1. Their time is like other resources. It is valuable and limited. They will need to plan what they will see and how they will use their time in order to make the most of their visit.
- Ask students to briefly review what they have learned about museums in their research.
- Introduce students to the **EconKids Museum Nuts and Bolts Journal**, pages 21 – 22. Explain that the journal will help them to identify different types of resources, goods and services in the museum. It will also help them use their time wisely and plan their classroom mini museum.
- Discuss the visit with students and ask them to predict what they will see.
- Explain to students that most museums base their exhibits on **artifacts** (objects made or changed by humans) and **specimens** (objects from nature). Ask students if they found examples of artifacts and specimens on the Web site.
- Explain to students that they may want to see a number of things, but they should plan to choose one exhibit in the museum that they want to explore in detail using their journals. (Instead of allowing students to choose, you may want to select an exhibit for the entire class to examine in depth. Focus on an exhibit that will help to reinforce classroom learning in an additional subject area, such as science.)

Procedures continued on the next page.

- Give the handout to students and have them fold it on the dotted line to create the journal. Review journal instructions and strategies for observing details and documenting their observations by taking accurate notes. Their journals will provide ideas for future writing and for planning their own exhibits in the classroom mini museum.

Building an Exhibit

In most museums, people with different skills and specialties (human capital) work together as a team to create and build exhibits. An **exhibit developer** deals with the content of the exhibit and writes labels to convey the message or main ideas. The developer also evaluates the potential effectiveness of the exhibit for visitors. A museum educator may be part of the team to help the exhibit meet the learning needs of both schools and families. An **exhibit designer** works with the three-dimensional aspects of the space and the overall “look” of the exhibit. A **curator** is in charge of the artifacts or specimens that will be on display and writes labels explaining these objects to viewers. **Graphic artists** help determine the colors that will be used and the typeface for labels. Other artists may include sculptors, painters and photographers. Media technicians may also create audio, video or computerized features for the exhibit. Carpenters, electricians and painters help make the exhibit plans a reality. Even an exhibit that appears simple is the result of a complex development process as well as the creativity and talent of many people.



The Children's Museum of Indianapolis.

A family enjoys the Boat Dock exhibit in ScienceWorks.

Part 3 — At the Museum

- Make sure that each student has a copy of the **Museum Nuts and Bolts Journal** and a pencil.
- Have each team of students pick up a museum map when they come into the building.
- Remind students to choose and locate one exhibit in the museum that will be the focus for their journal observations or make sure that students can locate the exhibit that you have chosen for the class. (In addition to providing economics learning experiences, the exhibit can help reinforce other areas of the curriculum, such as science, math, language arts or visual arts.)
- Suggest that students spend at least 10 minutes in this exhibit. It will be important for them to use all their senses to “stop, look, listen, think and write.”

Assessment

- Each student will use the **EconKids Museum Nuts and Bolts Journal** to examine a specific exhibit in the museum and make and record observations about the resources, goods and services related to that exhibit. After returning from the museum, each student will draw a picture showing one economic idea, such as goods, services or natural resources, he or she discovered in the museum exhibit. Students should include a definition of the economic concept. The pictures might become part of the displays in the classroom mini-museum. For examples, contact the Indiana Council for Economic Education. (See **Resources**.) The ICEE publishes a calendar of student artwork interpreting key economic concepts. Visit the Web site at: www.kidseconposters.com

Experience 2

Who Makes It Work?

As a follow-up to the museum visit, students chart the types of resources, goods and services they discovered. They also learn about the importance of interdependence and specialization in museum jobs. This experience will require approximately two class periods.

Academic Standards

Social Studies

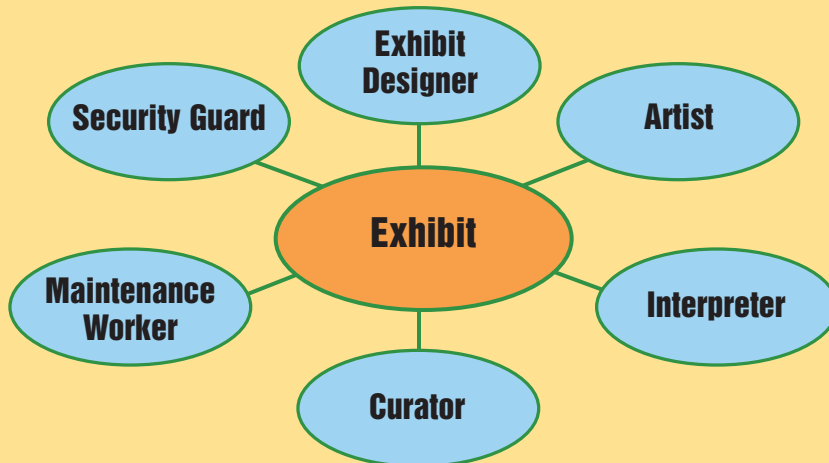
Standard 4 — Economics (3.4.4, 4.4.2, 5.4.4, 5.4.5)

Language Arts

Standard 2 — Reading Comprehension (3.2.3, 3.2.7, 4.2.2)

Standard 4 — Writing Process (3.4.2, 4.4.1, 4.4.3, 5.4.1)

Standard 5 — Writing Applications (3.5.5, 4.5.6, 5.5.6)



Working On and Behind the Scenes

Some museum workers interact with visitors every day. For example, a museum interpreter is an educator who is trained to help visitors enjoy and learn from experiences in galleries and exhibits. Security guards maintain safety in exhibits, the museum and museum grounds. Visitors also meet ticket sellers, librarians, actors, musicians, food service workers and sales persons, but they seldom meet the people “behind the scenes” who keep the museum running. Maintenance workers make sure museum spaces are clean and in good repair. Marketing and communications specialists write museum publications and ads to let people know what is available at the museum. Other workers behind the scenes are accountants, editors, groundskeepers and managers. Many of these people are full-time workers, while others work part time. Some people donate their time as volunteers in many different types of jobs.

Procedures

Part 1

- After the visit, debrief students using their journal notes. Use the chalkboard or pieces of flipchart paper to make lists of goods and services.
- Return to the chart of natural, capital and human resources the students began before the visit and help them expand their list of resources.
- Introduce terms, such as **curator**, **exhibit designer** and **exhibit artist**, and add them to the list. Discuss the roles of these people in developing an exhibit.
- Ask students why it is important for all of these workers to specialize in a particular job. Ask students: What might happen if a curator also had to try to be an artist or a security guard?
- Have students complete a simple task of some sort, such as making bookmarks to distribute at parent night, by working in teams. Each team member should specialize in one part of the task, such as tracing the bookmark, cutting, lettering or coloring.
- After teams have completed a few bookmarks, ask students how this is different from working alone. Then ask them to imagine that they needed to make 100 bookmarks. Ask them: Would it be best to work alone or work with a team of people who specialize in different jobs? How does **specialization** help people be more productive?
- Help students to understand that many people work “behind the scenes” at museums. Ask students if they saw evidence of these types of jobs during the visit and help them to continue to expand and refine their list of jobs.

Procedures continued on the next page.

- Remind students of the **Museum People Profiles** they read in Experience 1. Discuss the types of training and education each job requires. Ask students: How does each of the workers in the profiles depend upon other people in the museum?
- Explain to students that when workers specialize they are also more **interdependent**. They get more work done by working together and depending on each other. For example, the artist depends on the exhibit designer to develop plans for how the exhibit will look. The designer depends on the artist to carry out the plans and make them a reality.

Assessment

- 1) Check student understanding of the concept of interdependence by making a simple web on the chalkboard or chart paper with the word “exhibit” in a circle in the center of the web. Place different museum jobs around the circle and draw lines connecting them to the center. Ask students to explain how each of these workers depends upon the others in order to create and maintain the exhibit.
- 2) Have each student choose a job he or she would like to do from the list generated by the class. Each student will use museum Web sites to research the job and use **My Job Profile**, page 25, to develop notes. Each student will use the notes to write a description of his or her job in at least three well-organized descriptive paragraphs, including the information requested on the handout. Most museums include descriptions of job openings on their Web sites. Also see the Web site of the American Association of Museums, www.aam-us.org.

Bonus

Extending Experiences:

- Have students look for and record evidence of goods and services and productive resources in other settings, such as their homes or a shopping mall. (Social Studies — Economics 3.4.1)
- For the **My Job Profile** activity, have students interview each other about their jobs either before or after they write their profiles. (Language Arts — Listening and Speaking 3.7.1, 4.7.1, 4.7.2)
- Have students pretend they are applying for the job they have described and fill out job applications or write letters explaining why they would be good candidates for specific jobs. See page 26 for an application form from **The Children’s Museum of Indianapolis**. (Language Arts — Writing Applications 3.5.3, 4.5.6, 5.5.4)
- Have students use their notes from the **EconKids Nuts and Bolts Journal** to construct webs showing how natural, capital and human resources are used. (Social Studies — Economics 3.4.1)
- See two economics lessons related to museums, *Marketplace: To Show or Not to Show* and *Music Maestro, Please: Show Business and the Factors of Production*, posted at www.econedlink.org.
- To review economics concepts learned so far, have students complete **Dollar Dog’s Econ Definitions** on page 30. (Social Studies — Economics 3.4.1, 3.4.4, 4.4.8, 5.4.8) Answer Key: 1. goods; 2. service; 3. opportunity cost; 4. scarcity; 5. profit; 6. natural resource; 7. human resource; 8. capital resource; 9. specialization; 10. interdependence; and 11. budget.

Tips for Teacher

This lesson involves students in studying museum exhibits and activities from an economic perspective. Even if they have visited museums before, this will be a new idea. Experience 1 will require them to stop and spend some thoughtful time in at least one museum exhibit. To prepare, it may be helpful to practice observation and note-taking skills in a more familiar setting, such as the lunchroom or media center. Instruct students to visit one of these areas to observe and take notes on the use of productive resources or evidence of goods and services being produced and consumed in the school.

Students will also have little experience with the different types of jobs featured in Experience 2. Before they choose a job as the focus of their writing assignment in **My Job Profile**, have them research two or three different jobs using the Internet. Most museums and many businesses also feature employment and volunteer opportunities on their Web sites. Have students check the Web sites of Indiana museums in Lesson 1 for job openings. Also, see the Web site of the American Association of Museums for a listing of museum jobs www.aam-us.org.

Museum Links

Museum Web sites are wonderful sources for planning a visit. **The Children’s Museum of Indianapolis** Web site includes information on floor plans, current and future exhibits and special events. The site also provides an opportunity to view several unique museum artifacts and specimens. Visit **The Children’s Museum** Web site at childrensmuseum.org.

Think and Write Some More!

8. What kinds of goods and services were used to produce this exhibit?

Goods:	Services:
--------	-----------

9. What types of resources were used to produce this exhibit?

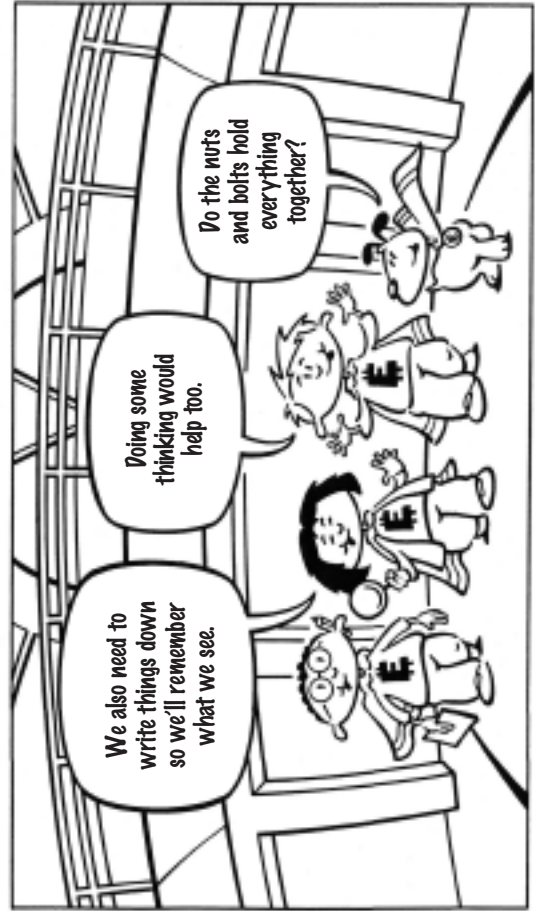
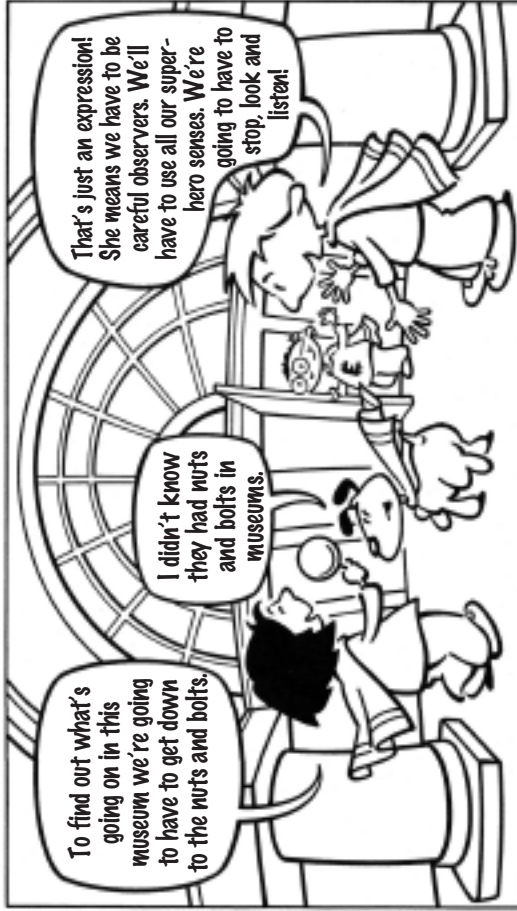
Natural Resources:	Capital Resources:
Human Resources:	

10. What kinds of jobs do you think were involved in creating this exhibit?

Job:	Skills:
------	---------

Museum Nuts and Bolts Journal

Name: _____ Date: _____



Fold here.

Stop!

Choose an exhibit in the museum that you want to investigate. Walk into the space. Stand or sit in a quiet spot.

Name of Exhibit: _____

What is this exhibit about? What is the main idea or message?

Look and Listen!

Use all your senses.

1. Look around and above you.
What colors can you see?
How do they make you feel?
What else can you see?
2. Listen! Close your eyes. What do you hear?
3. Is there anything you can touch in the exhibit?
How does it feel?
What is it made of?
4. In some exhibits, you can use your sense of smell.
Can you smell anything?

2.

Think and Write!

5. Are there things in the exhibit that you can use to help you learn more?
Signs and Labels? Yes No
Video? Yes No
Computer games? Yes No
Recordings? Yes No

6. Which of the objects in the exhibit are artifacts (objects made by humans)? Which objects are specimens (objects from nature)?

Artifacts:	Specimens:

7. Why do you think these objects were chosen for the exhibit?

3.

Museum People Profiles



The Children's Museum of Indianapolis.

Rashida Walker — Interpretive Performer

My job at **The Children's Museum** is to be an **interpretive performer**. That means that I am an actor who is also an educator. I help visitors to understand the things they see in the museum through my performances. I help bring some of the museum exhibits to life by playing the roles of people in earlier times. For example, in the **Mysteries in History** gallery I sometimes play the role of Jane Thompson in Danner's Variety Store. The year is 1910.

In order to become an actor, I took a lot of performing arts classes when I was growing up. I took classes in school and I had some private teachers too. When I went to college, I continued to take acting classes and that helped me become a better performer. I always wanted to be an actor, but getting this job was a surprise! It is very hard to find a full time job where you can be an actor or an actress.

Imagine, right now, doing something that you love to do. That can be playing basketball, playing video games, riding your skateboard, anything. Now imagine someone giving you a job so that you

can do the thing you love all day. Sounds great right? I think that is the most satisfying thing about my job. I get to do what I love every day and help kids while I'm doing it.

Even though I love my job and I am lucky enough to be able to act full time, I also am an actor in my spare time. I like to do community theater and I really enjoy directing shows.

What I like most about my job at **The Children's Museum** is being creative and thinking up new ideas. I also love to sketch and draw. I know I've accomplished something when I see children and families having a good time with the displays and activities I designed. It's very rewarding to see my ideas become a real exhibit or a gallery that people can enjoy.

Even though I'm very busy with my work, I also enjoy spending time with my family. My wife and I have a three-year-old daughter and a new baby girl, so I don't have much spare time! Whenever I have time, I enjoy biking, gardening and antique cars.



The Children's Museum of Indianapolis.

Craig Wetli — Senior Exhibit Designer

As an **exhibit designer**, I design and plan museum galleries. That means taking an empty space and planning how it will look and how things will be built. I design activities, cases and displays and even the seating and furniture. I create draft drawings on the computer, make scale models and do color sketches that show what the space will look like.

To prepare myself for this kind of work, I studied Industrial Design in art school. To be a good designer, you need to study art and be good at drawing. It helps to study math too, in order to learn to make scale drawings. You also need to be a good listener and a good communicator.



The Children's Museum of Indianapolis.

Donn Smith — Exhibit Artist

My job title is **exhibit artist**. I have many different responsibilities. This includes thinking through the problems and steps needed to carry out an exhibit design. I make original models of a part of an exhibit. Then I create that part by making a sculpture, mold or cast. Sometimes I work as a carpenter or a mechanic in order to build something that is needed for an exhibit.

I have had a lot of experience in doing this type of work. For 10 years, I was a commercial sculptor. I have also worked as a theater prop designer and sculptor and as a carpenter building theater sets and scenery.

The best thing about my job at **The Children's Museum** is being able to work on creative projects with a group of the most creative and bright people I have ever met. I am able to use most of my talents and experience to help create extraordinary exhibits. It is extremely satisfying to have been able to work on an exhibit as amazing and beautiful as **Dinosphere!**

In addition to being a sculptor and exhibit artist, I enjoy expressing myself in other ways. I am a singer, songwriter and performer in my spare time.



The Children's Museum of Indianapolis.

Kathy Schott — Safety Security Manager

I oversee the safety and security program for **The Children's Museum**. I hire and train security officers and manage day-to-day security activities. To prepare for this type of work, I went to college and earned a Bachelor of Science in Criminal Justice. I have also had to learn about laws and safety regulations, such as fire codes.

When I first graduated from college, I considered becoming a police officer. After I started working for **The Children's Museum** I learned that I liked to interact with the people here. Different, interesting things happen here every day. I enjoy helping people resolve problems and making them happy. It is also satisfying to see a large security team working together to provide a safe environment.



The Children's Museum of Indianapolis.

John (Mud) Medvescek, Lt. I.F.D. — Security Officer

I am a lieutenant in the Indianapolis Fire Department. I also work part time as a security officer at **The Children's Museum**. I provide security, emergency medical services, fire protection and safety for museum staff and visitors. This type of work requires special training. I have a fire science degree and training as an emergency medical technician from the fire department.

I wasn't sure what I wanted to do when I graduated from high school and I was soon drafted into the Army. Now I'm glad that I decided on a career as a firefighter and security officer. I have been able to help **The Children's Museum** with its security program and I have encouraged other security officers to get training as fire fighters. What I like most about my job is the team I work with and knowing that I am helping people.

Even though I work at two jobs I enjoy, I still find time to spend with my family. I also like reading and fishing.

Job Application Form • The Children’s Museum of Indianapolis



Application for Employment

P.O. Box 3000 • Indianapolis, IN 46206-3000 • www.ChildrensMuseum.org

We consider applicants for all positions without regard to race, color, religion, creed, gender, national origin, age, disability, marital or veteran status, sexual orientation, or any other legally protected status.

WE ARE AN EQUAL OPPORTUNITY EMPLOYER

(Please Print)

First Name	MI	Last Name	Date of Application
Address			Social Security #
City	State	Zip Code	Telephone Number(s)
E-mail Address			

Position(s) of Interest FOR WHICH YOU QUALIFY	
1st	2nd
3rd	4th

Have you filed an application with us in the last six months? Yes No

Have you ever been employed with us? Yes No

If yes, give date: _____

If you are under 18 years of age, can you provide required proof of your eligibility to work? Yes No

Are you currently employed? Yes No

May we contact your present employer? Yes No

Are you prevented from lawfully becoming employed in this country because of visa or immigration status? Yes No
Proof of citizenship or immigration will be required upon employment.

On what date would you be available for work? _____

Are you available to work: (check as many as apply) Full-time Part-time

Year-round Temporary – dates available: _____

Check (✓) as many as apply:

Days Mon. ___ Tues. ___ Wed. ___ Thurs. ___ Fri. ___ Sat. ___ Sun. ___
 Evenings Mon. ___ Tues. ___ Wed. ___ Thurs. ___ Fri. ___ Sat. ___ Sun. ___

Can you travel if a job requires it? Yes No

Have you been convicted of a felony within the last 7 years? Yes No
Conviction will not necessarily disqualify an applicant from employment.

If yes, please explain: _____

18-10000000

Job Application Form • The Children’s Museum of Indianapolis

Education

	Name and Address of School	Course of Study	Years Completed	Diploma Degree
High School				
Undergraduate College				
Graduate Professional				
Other (Specify)				

Indicate any foreign languages you speak, read and/or write			
	FLUENT	GOOD	FAIR
SPEAK			
READ			
WRITE			

Describe any specialized training, apprenticeships, skills and extra-curricular activities.

Describe any job-related training received in the United States military.

Job Application Form • The Children’s Museum of Indianapolis

Employment Experience

Start with your present or last job. Include any job-related military service assignments and volunteer activities. You may exclude organizations that indicate race, color, religion, gender, national origin, disabilities or other protected status.

1	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
Your Job Title	Supervisor			
Reason for Leaving				
2	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
Your Job Title	Supervisor			
Reason for Leaving				
3	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
Your Job Title	Supervisor			
Reason for Leaving				
4	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
Your Job Title	Supervisor			
Reason for Leaving				

If you need additional space, please continue on a separate sheet of paper.

List professional, trade, business or civic activities and offices held.
 You may exclude membership that would reveal gender, race, religion, national origin, age, ancestry, disability or another protected status:

Job Application Form • The Children’s Museum of Indianapolis

How did you learn about employment opportunities at The Children’s Museum?
(Circle one and identify):

newspaper/magazine _____ friend/relative _____
college/university _____ other _____
museum’s web site _____

Please list the names of any museum employees you know.

Name _____ Relationship _____

Name _____ Relationship _____

References

1.	_____ () _____
	Name _____ Phone # _____
	Address _____
2.	_____ () _____
	Name _____ Phone # _____
	Address _____
3.	_____ () _____
	Name _____ Phone # _____
	Address _____

Applicant’s Statement

I certify that answers given herein are true and complete to the best of my knowledge. I authorize investigation of all statements contained in this application for employment as may be necessary in arriving at an employment decision. I understand a background check will be conducted prior to any job offer.

I understand and acknowledge that, unless otherwise defined by applicable law, any employment relationship with The Children’s Museum is of an “at will” nature, which means that I may resign at any time and The Children’s Museum may discharge me at any time with or without cause. It is further understood that this “at will” employment relationship may not be changed by any written document or by conduct unless such a change is specifically acknowledged in writing by an authorized executive of the museum.

In the event of employment, I understand that false or misleading information given in my application or interview may result in discharge. I understand, also, that I am required to abide by all rules and regulations of The Children’s Museum.

Signature of Applicant

Date

Dollar Dog's Econ Definitions

See if you can fill in the blanks. If you need help, check my definitions.



1. My chew toys and dogs treats are _____.
2. Dog grooming is a _____.
3. I love to eat dog treats and chase the cat, but I can't do both. I am going to choose to eat dog treats and not chase the cat. Not chasing the cat is my _____.
4. I want lots and lots and lots of dog treats! But the resources it takes to make dog treats are limited. This is an example of _____.
5. The dog treat factory sells dog treats for more money than it costs to produce the treats. The factory makes a _____.
6. My doghouse is made from wood, a _____ resource.
7. The work of the carpenter who built my doghouse is a _____ resource.
8. The hammer the carpenter used to build my doghouse is a _____ resource.
9. My veterinarian specializes in taking care of sick dogs. The veterinarian's assistant specializes in giving shots to well dogs. This is _____.
10. The vet and her assistant depend on each other to do different jobs at the animal hospital. This is an example of _____.
11. To plan for the expense of owning a dog, the EconKids need a _____.

Definitions

- **budget** — a plan for using income for a particular purpose
- **capital resources** — goods that are used to produce other goods and services.
- **goods** — objects, such as a toy, that satisfy someone's wants
- **human resources** — the human work that produces goods and services
- **interdependence** — to depend on each other for goods and services
- **natural resources** — resources found in nature
- **opportunity cost** — the next best thing you give up in order to chose something else
- **profit** — the money that is left after paying for the cost of producing a good or service
- **scarcity** — the idea that resources are limited in relationship to people's wants
- **services** — actions that someone does for someone else
- **specialization** — to specialize in producing a specific kind of good or service

Lesson 3

Common Sense

Students learn about two Indiana philanthropists, Eli Lilly and Mary Stewart Carey, who helped to create and support museums, and discover that many people choose to donate their time and money to benefit the community. Even young people can use their time, talent and other resources for the common good.



IUPUI University Library Special Collections and Archives.

Eli Lilly



Bretzman Collection, Indiana Historical Society.

Mary Stewart Carey (left)

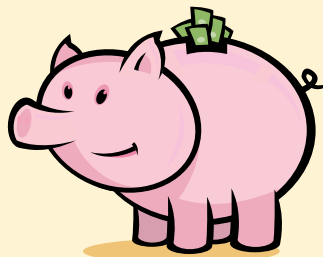
Objectives

Students will:

- Define profit and give examples of the different ways that profit from business is used.
- Identify the contributions of Hoosier entrepreneurs and philanthropists to the community.
- Suggest ways that people of all ages can help their community by volunteering.
- Speculate about why people choose to use their resources to help others.
- Correctly use economics concepts and other new vocabulary in their writing.
- Read for comprehension and use the information to write well-constructed persuasive letters and newspaper articles.

Word Account

- apprentice
- charity
- civic leader
- common good
- donate
- endowment
- mass production
- opportunity cost
- philanthropist
- profit
- volunteer



You will need ...

Materials:

- **Time and Treasure** biography handout, pages 37 – 38, one per student
- **Key Questions** handout, page 39, one per pair
- **Follow Up Questions** Transparency 1, page 40
- **Time and Treasure Venn Diagram** Transparency 2, page 41
- **Very Special Volunteers** handout, pages 44 – 45, one per student
- **Five Ws Chart** handout, page 46, one per student



Time

Four to five class periods.

Focus Questions

- What is a philanthropist?
- What are some of the ways that profit from selling a good or service is used?
- Why are philanthropists important in our economy?
- Why do some businesses and individuals use some of their profits to help people and organizations in the community?
- What is the opportunity cost of using profits this way?
- Does philanthropy help both the community and businesses?
- If you owned a business, how would you use the profit from your business?
- Do you need to be wealthy to donate your time, money or talents?
- How does being a volunteer benefit both the volunteer and the community?

Experience 1

Time and Treasure

After reading the biographies of two Hoosier philanthropists, students write persuasive letters explaining why they should receive good citizenship awards. This experience will take approximately two class periods.

Academic Standards

Social Studies

Standard 1 — History (3.1.7, 4.1.9);
Standard 3 — Civics and Government (3.2.1, 4.2.7);
Standard 4 — Economics (4.4.7, 4.4.8)

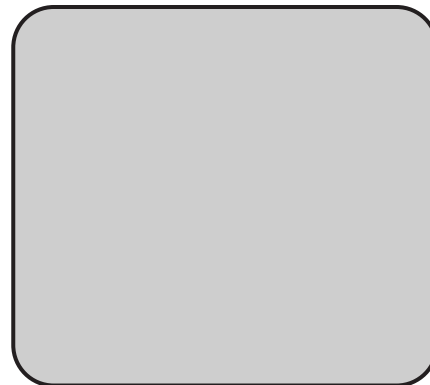
Language Arts

Standard 2 — Reading Comprehension (3.2.3, 3.2.5, 4.2.1, 4.2.2, 5.2.2, 5.2.3);
Standard 4 — Writing Process (3.4.3, 3.4.6, 4.4.3, 4.4.10, 5.4.3);
Standard 5 — Writing Applications (3.5.3, 3.5.4, 4.5.5, 4.5.6, 5.5.4, 5.5.5)

Philanthropists

Profits from businesses are used in a number of ways. Part of the profit is usually reinvested in the business and part is distributed to owners or shareholders. Of course, profits are also subject to taxation. In the United States, businesses and individuals often choose to contribute some of their profits to charitable organizations or to the community for parks, museums or other facilities. It is important to remember that there is opportunity cost involved in charitable giving. The money used in this way is not available for other purposes, but there are also benefits to the person or business making the contribution. Charitable contributions are not taxed, so they provide a “tax write-off.” Donating to charity also creates good will and enhances the reputation or public image of an individual or organization. In addition, the community benefits and becomes a better place for everyone to live.

One of the most important benefits of contributing to charities is the sense of personal satisfaction and fulfillment that comes from helping others. People who help others by donating their time, money or other gifts are called **philanthropists**. The profit generated from business is usually the source of these gifts but it is not necessary to be wealthy to be a philanthropist. People with small amounts of free time and modest incomes often donate some of their time and money to the community.



The Children's Museum of Indianapolis.

The carriage house behind the Indianapolis Propylaeum was the museum's first home.

Procedures

Part 1

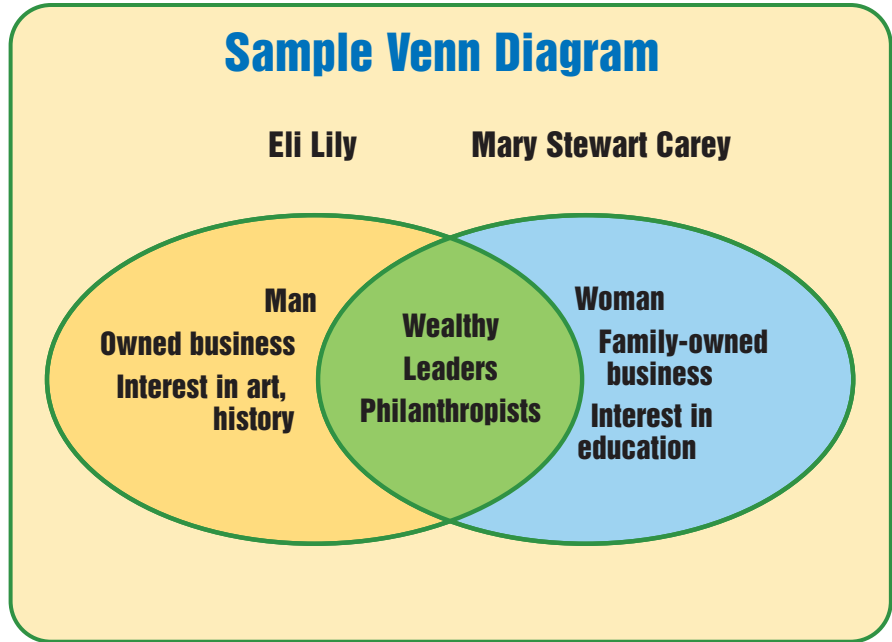
- Remind students of their investigation of museum jobs using the **Nuts and Bolts Journal**. Ask them to think about how museums make money to pay museum employees.
- Remind students of their research on museums in Lesson 1. Ask them: Where do museums get money to operate? Students will probably remember that most museums get a significant part of their funding from donations by individuals and businesses.
- Explain to students that people who help others by donating their time, money or other gifts are called **philanthropists**.
- Remind students that profit is the dollar amount that is left after paying for the costs of producing a good or service. Discuss the different ways that profits are used.
- Introduce students to Eli Lilly and Mary Stewart Carey, two Hoosiers who were known for helping others.

Procedures continued on the next page.

- Give each student a copy of the biography handout, **Time and Treasure**, pages 37 – 38. Place students in pairs and give each pair a copy of the **Key Questions** handout, page 39.
- Have students read the biographies of Eli Lilly and Mary Stewart Carey and then work in pairs to answer the **Key Questions**.
- Give students enough time to complete the handout. Check for comprehension by discussing the answers.

Part 2

- Debrief the student pairs by placing the **Follow Up Questions** (Transparency 1) on the overhead or the chalkboard. Engage students in discussing the questions to inspire deeper thinking. Place the **Venn Diagram** (Transparency 2) on the overhead and help students to compare and contrast Lilly and Carey.
- Ask students to imagine that an organization made up of business owners in your community plans to give a “Good Citizenship Award.” Have each student write a persuasive letter to the organization giving at least three reasons why either Eli Lilly or Mary Stewart Carey should receive the award. The letter should also explain what they each had to give up (opportunity cost) in order to make contributions to the community.
- You may wish to place **Dollar Dog’s Letter** (Transparency 3) on the overhead and have students suggest ways to improve the letter using the Form (Transparency 4) on page 43. The same form can be used to evaluate student work.



Assessment

Each student will write a persuasive letter clearly stating a position and supporting that position with facts and details. As students write, they will keep the interests and concerns of the specific audience in mind. They will also include at least three reasons why Lilly or Carey should receive the award. Since the audience is made up of business owners, students should emphasize Lilly’s and Carey’s connections to business and how they used profits in different ways to help the community. Students also should give at least one example of the opportunity cost involved in their charitable work. Letters will vary in length according to the age of the student. All letters will have a date, salutation, body, closing statement and signature. Students should use varied word choices to make their writing more interesting and review and revise their work for clarity.



Experience 2

Time and Talent

In this experience, students meet museum volunteers of different ages and talents and learn how volunteering benefits both the volunteer and the community. They conduct interviews with volunteers in the school or family setting and write brief articles for others to read. This experience will require two to three class periods.

Academic Standards

Social Studies

Standard 2 — Civics and Government (4.2.7, 5.2.11);

Standard 4 — Economics (3.4.4, 5.4.4)

Language Arts

Standard 2 — Reading Comprehension (3.2.2, 4.2.2);

Standard 4 — Writing Process (3.4.3, 3.4.8, 4.4.5, 4.4.11, 5.4.3, 5.4.5, 5.4.10);

Standard 5 — Writing Applications (3.5.2, 3.5.5, 4.5.6, 5.5.6)

Procedures

Part 1

- Ask students to remember what they learned about museum jobs from their museum visit and the **Nuts and Bolts Journal**. Ask them if they observed any jobs that might have been carried out by volunteers. What kinds of goods and services or productive resources do they think volunteers in a museum might provide?
- Introduce students to the handout **Very Special Volunteers**, pages 44 – 45. Read one of the selections with the class and complete one of the “Who? What? When? Where? or Why?” sections of the **Five Ws** chart, page 46. (For older students, omit reading the selection and simply demonstrate procedures for completing the chart.)
- Explain to students that the purpose of the chart is to help them learn how to ask questions that gather information and how to summarize information.
- Divide the class into pairs to read the remaining selections and complete the **Five Ws** chart.
- When the charts are done, discuss the effectiveness of the chart in helping students to read carefully and focus on important information. To inspire deeper thinking ask the following questions:
 - Why have these persons decided to donate their time by being volunteers?
 - What kind of preparation did they need to do their volunteer work?
 - What kinds of goods, services and productive resources do they provide?
- What kinds of skills and talents are they using in their work?
- What kinds of opportunity cost do you think are involved?
- How does being a volunteer benefit each of these persons?
- How does their volunteer work benefit the museum and the community?
- Is it necessary to do volunteer work to be a good citizen? Why or why not?
- Introduce students to the saying “Time is Money” and discuss its meaning. Remind them of their museum visit where they learned that their time is an important resource. In this case, the time that volunteers spend in the museum is time that they might otherwise use to make money, spend with their families or do something else that they enjoy.
- Ask students: Why would people work at the museum for free when they could be paid to work somewhere else? Do you think the museum volunteers are using their time well? Is donating time as important as donating money? Are museum volunteers philanthropists?

Why would people work at the museum for free when they could be paid to work somewhere else?





Will Elsner (left) and George Wagner receive awards for their volunteer work in building this dollhouse for Playscape.

What's it worth to you?

Volunteer work benefits the community by providing goods and services that might have to be purchased or that cannot be purchased due to lack of funds. There are potential long-term outcomes for both the community and the individuals involved. People directly receiving volunteer goods and services may feel that someone cares about them and may form stronger connections to the community as a result. A person who volunteers may feel a sense of accomplishment and self-worth.

It is important to remember that there are opportunity costs involved. The time and effort dedicated to doing volunteer work cannot be used for other activities. People decide to become volunteers because they feel that the benefits for themselves and others outweigh the costs. Being a volunteer can be an extension of a career and a way of continuing to be useful or productive. It can also allow people to discover new talents or pursue interests that have been deferred. This may help an older person remain healthy and productive later in life.

Volunteering can enable a young person to gain work experience and develop skills that may lead to a future job or career. Volunteering may also encourage young people to have more interest in learning and to pursue higher education or training for a specific job. Long-term benefits for the community might include a better-educated workforce and lower health-care costs.

Part 2

- Ask students if they know anyone who does volunteer work. Help them think of examples. Volunteers may be parents, grandparents, friends or the students themselves. They may be people who carry out an activity on a regular basis, such as a scout leader, or people who help out on special occasions, such as a community clean-up day.
- Prepare students to interview and write an article about a volunteer in your school or community for the school newsletter or Web site. School volunteers might include room parents and members of parent councils. In some schools, volunteers do work in the office, lunchroom or media center. They may assist with school safety by serving as bus monitors or crossing guards. Articles should explain how the volunteer exercises good citizenship and contributes to the good of the community as a whole.
- Review guidelines for conducting interviews in person, by phone and by e-mail. These guidelines might include: 1) Introduce yourself; 2) briefly explain your purpose; 3) be a good listener; 4) ask questions that can't be answered yes or no; 5) take accurate notes; 6) make sure to quote the person you are interviewing correctly; and 7) remember to say thank you.
- Discuss the criteria for good interview questions with students. For example, questions should be open-ended. They should encourage the person being interviewed to provide information and not just to say yes or no.

The Children's Museum of Indianapolis.

- Use the chalkboard or chart paper to brainstorm a list of questions that students want to ask. Help students develop a list of four or five open-ended questions and have them copy the questions.
- Divide the class into teams of three or four students. Have students practice their skills by interviewing each other using the questions the class has developed. Make sure each student takes responsibility for specific interview and writing responsibilities.
- After the interviews with volunteers, have teams draft their articles and then proofread, edit and revise their writing for publication in a classroom or school publication, a school Web site or other showcase for student work.

Assessment

Each team will write an article for publication explaining how a person in the community exercises good citizenship and contributes to the common good through volunteer work. Articles will be based on interview questions developed by the students and will demonstrate good interviewing skills, including the ability to take accurate notes. Students will use descriptive words and include economics terms, such as opportunity cost. They will observe writing conventions and will proofread, edit and revise their work for others to read.

Tips for Teacher

Point out to students that many people make charitable giving part of their individual or family budgets. They may also donate food or clothing to people in need. Family members of all ages may donate their time to organizations that help others such as religious groups, boys and girls clubs or scouts. Students may need help to understand that volunteering time and talent provides mutual benefits for the volunteer and the community. There are also opportunity costs in volunteer work. Use local newspapers to introduce students to people who volunteer and discuss how this affects the community. Teacher planning time will be needed in helping students set up interviews with volunteers. It will probably be best for younger students to interview people in the school setting or family members. It will also be important for families to know about this activity and its purpose in advance.



Bonus Extending Activities:

- Have students use their visual arts skills to design awards for Eli Lilly or Mary Stewart Carey to go along with the persuasive letter.
- Engage students in researching and writing about a philanthropist who has contributed to your own community.
- Invite parents who serve in volunteer positions on boards, such as the hospital or a community organization, to speak to the class about their experiences.
- Have students research volunteer opportunities in your community. Some counties may have a volunteer bureau. This might be a good source for research or for classroom speakers. Many schools and communities have service-learning programs that allow students to do volunteer work as individuals or groups. Service-learning opportunities might include helping out at the local animal shelter or working at the food pantry or soup kitchen. There are also “good neighbor” programs that allow students to help older members of the community with household chores.

Time and Treasure

Eli Lilly: Building a Foundation (1885 – 1977)

Eli Lilly was the grandson of Colonel Eli Lilly, a Civil War veteran who started a small business making drugs and medicines in Indianapolis in 1876. Eli Lilly continued and greatly expanded the business that his grandfather had begun.

Born in 1885, Eli Lilly became president of Eli Lilly and Company in 1932. The business was already a successful drug-making company partly because of its location. In the late 19th and early 20th centuries, Indianapolis was the hub for several major railroads. Lilly's products could be sent quickly by train to any part of the country. This helped the company to grow.

Many businesses failed during the Great Depression of the 1930s but Eli Lilly wasn't discouraged. He saw an opportunity to make his company even more successful. Using the ideas of Henry Ford, he began to apply the techniques of **mass production** to the process of making drugs. He spent thousands of dollars to increase the amounts and types of drugs his company



Eli Lilly

IUPUI University Library Special Collections and Archives

could produce and advertised to develop a market for these products. In the process, he created thousands of jobs at a time when jobs were desperately needed. He also made Eli Lilly and Company a national and international leader in the drug industry.

Although he was a successful businessman, Eli Lilly is probably best remembered for his philanthropy and civic leadership. He enjoyed art and music and encouraged these activities in the community. He also loved to study history and was an active member of the Indiana Historical Society. In 1937, he helped to create the Lilly Endowment.

An **endowment** establishes a fund that will produce a permanent source of income. Today the Lilly Endowment continues to use this income to provide millions of dollars for schools, colleges, museums, parks and other community resources throughout Indiana. Museums that have received funding from the endowment include Conner Prairie Settlement, **The Children's Museum of Indianapolis** and the Indianapolis Museum of Art.

"Mr. Eli," as his employees called him, learned from his grandfather about the importance of contributing to the good of the community as a whole. He was able to build on his grandfather's work and create a strong foundation for both his business and the community.

Time and Treasure

Mary Stewart Carey: Civic Leader (1859 – 1938)



Bretzman Collection, Indiana Historical Society.

In 1907 President Theodore Roosevelt visited the Indianapolis home of Vice President Charles Fairbanks. Mary Stewart Carey (seated first on the left) helped Mrs. Fairbanks organize an elegant party for the occasion. James Whitcomb Riley (seated third from the left) was one of the guests. President Roosevelt is seated seventh from the left.

In 1924, Mary Stewart Carey visited the Brooklyn Children's Museum, the first children's museum in the world. She was so impressed that she decided children in Indianapolis deserved their own museum.

Mrs. Carey was just the person to get the job done. Even though she was busy with four children and seven grandchildren, she was one of Indiana's most active civic leaders. Her family owned the Stewart-Carey glass manufacturing company, which was managed by her husband. Profits from the business provided the family with enough money to live comfortably. They could afford to hire cooks and housekeepers to do some of the housework.

Mary Stewart Carey had time to devote to community causes but

also had individual qualities that were priceless. She had great determination and commitment. She knew how to organize work that needed to be done and how to get other people involved. She chose to use these talents to help her community. Other people respected her for her efforts.

Mrs. Carey was especially interested in children and education. She was a member of several organizations that worked to improve community life. She asked people she knew in all of these organizations to help support the new museum. In 1925 she and her friends established the museum in a rented carriage house on the old north side of Indianapolis. People in the community, including children, donated some of the museum's first collections of objects.

After the death of her husband in 1927, Mrs. Carey began spending more time at her farm outside the city. She soon realized that **The Children's Museum** was growing and needed more space, so she provided her old family home in a beautiful mansion at 1150 North Meridian Street as a new site for the museum. The museum continued to grow and expand. In 1946, it moved to its present location at 3000 North Meridian Street.

Mary Stewart Carey continued to work actively to support the museum until her death in 1938, at the age of 79. In her will, she left \$5,000 to the museum, but her true legacy cannot be counted in dollars. The museum was her dream and she worked to make it come true. Do you think she would be surprised to see how it has grown?

Key Questions

Questions	Eli Lilly	Mary Stewart Carey
When did they live?		
What kinds of businesses did their families have?		
What special interests did they each have?		
What contributions did they make to the community?		

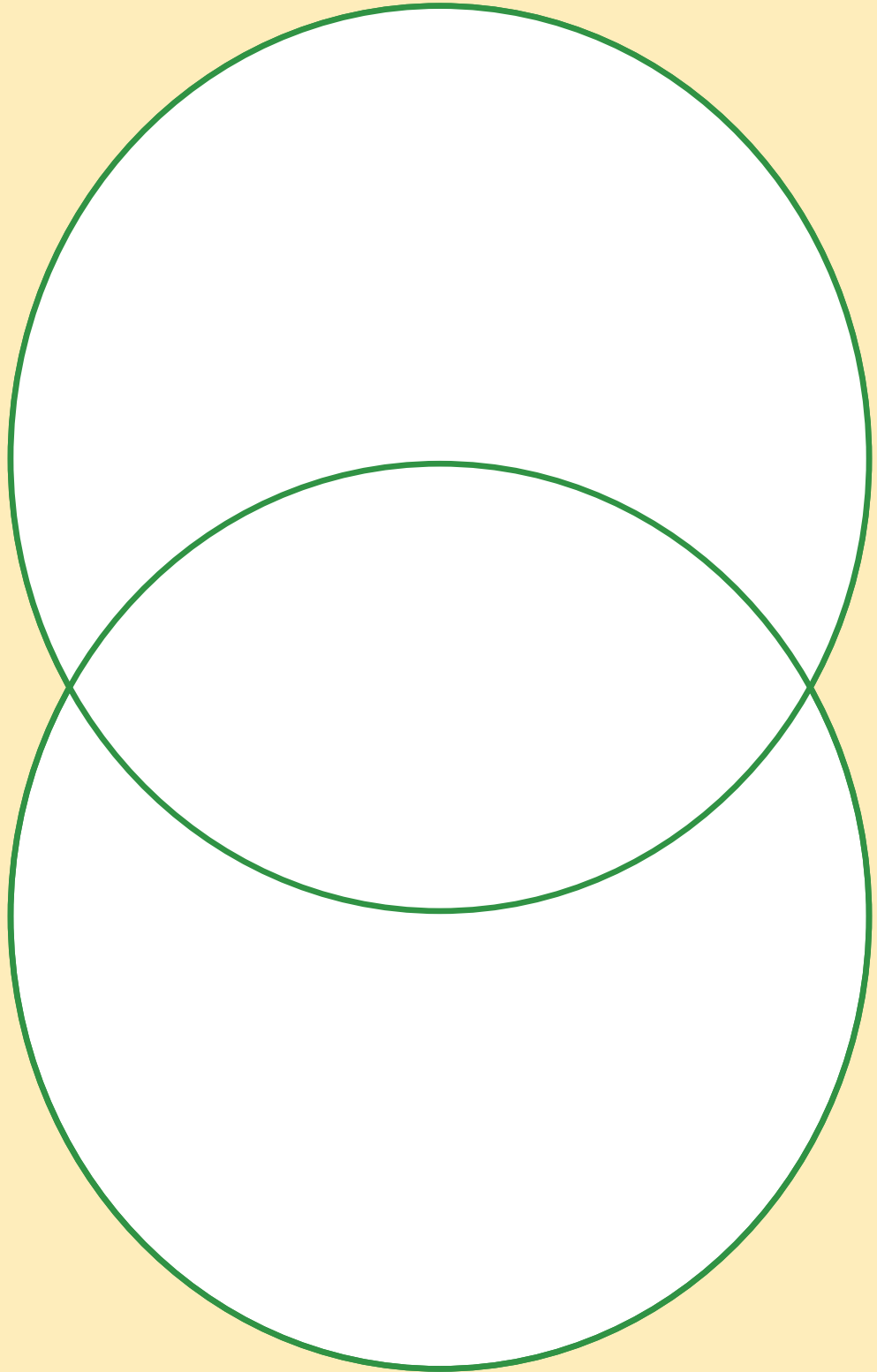
Follow-Up Questions

- Were Eli Lilly and Mary Stewart Carey both philanthropists?
- Why or why not?
- How were they alike? How were they different?
- Why do you think they chose to contribute their time and money to the community?
- What did they have to give up (opportunity cost) in order to help the community?
- Would you say that Eli Lilly and Mary Stewart Carey practiced good citizenship? Why or why not?
- How does philanthropy (donating time and money) for things like parks and museums help create goods and services?
- How does donating time or money help the person or business that makes the donation?
- Do you have to be rich to be a philanthropist?

Time and Treasure Venn Diagram

Eli Lily

Mary Stewart Carey



Dollar Dog's Letter

October 13, 2005

Anytown Chamber of Commerce
121 Main Street
Anytown, Indiana 46000

Dear Sirs:

I would like to nominate Mary Stewart Carey for the Good Citizenship Award. Mrs. Carey gave her time for many years to help the community. She was very interested in children and helped to start The Children's Museum of Indianapolis in 1925. She even gave her own home as a site for the museum. (I'm sure she was also very kind to animals, especially dogs.)

Today, the museum has grown and provides wonderful experiences for thousands of children. (This is a good thing for dogs, too. When children are happy, dogs are happy!) The museum also provides jobs for people and buys goods and services from local businesses. Thanks to Mrs. Carey, the museum is making good contributions to our community.

Mary Stewart Carey was really a good citizen who deserves the Good Citizen award. Thank you for considering this nomination.

Sincerely,



Dollar Dog

Is It a Good Letter?

What score would you give Dollar Dog on his persuasive letter?

3

The letter states a position and includes several facts and details.

2

The letter states a position and includes a few facts and details

1

The letter states a position but does not include facts and details.

0

The letter does not state a position, facts or details.

The letter states three or more good reasons for giving the award and mentions opportunity cost.

The letter states two good reasons for giving the award, but doesn't mention opportunity cost.

The letter only states one reason, or the reasons are not very good.

The letter does not state any reasons for giving the award.

The letter tells how Carey and Lilly were connected to business and how they used profits to help the community,

The letter mentions good connections to business, but it does not tell how Carey and Lilly used profits to help the community.

The letter makes a poor attempt to mention business connections. It does not tell how Carey and Lilly used profits to help the community.

The letter does not mention business connections or how Lilly and Carey used profits to help the community.

The letter has a date, salutation, body, closing statement and signature. All the parts of the letter are in the right place.

The letter has a body and closing statement, but one of these parts is missing: date, salutation or signature.

The letter has a body, but does not have a closing statement. One or more of these parts are missing: date, salutation or signature.

The letter has a body, but all the other parts are missing.

The letter uses a variety of words. It is clear and uses good spelling and grammar.

The letter is clear and uses good spelling and grammar. It does not use a variety of words.

The letter is clear, but it has a few mistakes in spelling and grammar.

The meaning of the letter is not clear. It has many mistakes in spelling and grammar.

Add the numbers to get the total.

Total =

How would you find Dollar Dog's final score?
(Divide the total by five or estimate to get the Final Score.)

FINAL SCORE =

Very Special Volunteers



The Children's Museum of Indianapolis.

Brendan — Museum Apprentice Program (MAP)

My name is Brendan and I'm 16 years old. I started working as a volunteer at **The Children's Museum of Indianapolis** in the Museum Apprentice Program six years ago. I provided information to visitors and did games, crafts and activities. When the Paleo Prep Lab opened, I moved to that space. Now that Dinosphere is open, I am working as an interpreter with visitors in the gallery.

I decided to become a volunteer because I have always enjoyed the museum. I always got a sense of amazement when I walked through the main doors. When I learned that there was an opportunity to become part of that, I joined the program and went through MAP training. My high school classes in anatomy, zoology and speech have also helped me do a better job with my presentations to visitors.

Helping visitors is what I enjoy most about being a volunteer. There is nothing I love more than that smile on someone's face when something clicks. I call that

the "light bulb" moment. My greatest accomplishment so far has been earning the "Autumn Turner Youth Award." It is given to one apprentice who is the most outstanding example of kindness, caring and consideration for the year.

Because of my experience at **The Children's Museum**, I encourage other students to become volunteers. I want other young people to understand that being a volunteer isn't just about the end result. It is also about the process that you go through and what you learn along the way. Because of what I've learned I think I would like to go into museum education as a career. **The Children's Museum** has had everything to do with that. They have trained me and have shown me how wonderful hands-on education can be.



The Children's Museum of Indianapolis.

Margaret (Sam) Kelso — Volunteer

As a volunteer at **The Children's Museum** I do a little bit of everything. I help out with school groups and pre-school classes. I greet people at the

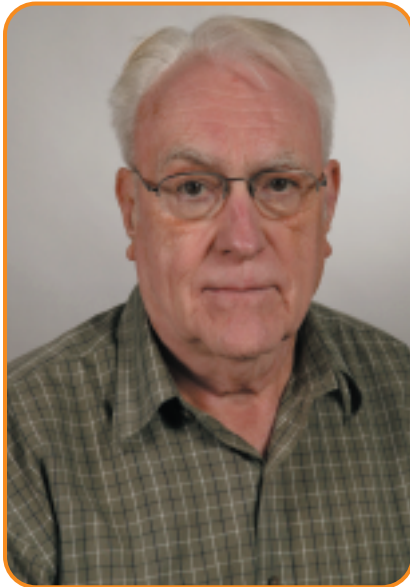
entrance to the museum and take tickets for Dinosphere. I also work with a group of volunteers on special projects, such as preparing materials for activities and games. I usually work from one to four days a week. Stamping kids' hands with ink when they enter the museum is the most fun. Little kids love it! They want to be stamped everywhere!

When I retired, I wanted to give back to the community. I decided to volunteer at the museum so that I could do something that was both useful and uplifting. My job before I retired was with the Marion County Juvenile Court. I helped to train employees and talked to students about how to stay out of trouble and do well in school. I used all my skills in interpersonal relations. That means knowing how to get along with people, working with them, motivating them to do their best and caring about them. I use all these skills in my volunteer work too.

What I like best about being a volunteer at the museum is the challenge of doing a variety of jobs and the satisfaction of working with a wonderful group of people. Recently I was one of three volunteers who were recognized for donating the most time to the museum. Last year, the museum also nominated me for the Mayor's Community Service Award.

It is important to remember that anyone can be a volunteer. People with challenges in their lives can still contribute a lot. One volunteer I work with is blind. I admire her so much for her determination and willingness to do difficult jobs. Everyone has something to share. It doesn't have to be something

big. You can make a contribution by being nice to the people around you. It is easy to be nice to your friends. Try being a friend to someone who may not be a friend to you. Some day they may be able to help someone else and that helps the community.



The Children's Museum of Indianapolis.

Will Elsner — Volunteer

I started working as a volunteer at **The Children's Museum** seven years ago. Because model railroading was one of my interests, I started out running the toy trains. Later I began doing woodworking in the production department, where I help to develop exhibits.

I have always enjoyed working with wood. When I was a college student, I worked during the summer on construction projects and in a cabinet shop. That is where I learned to operate power tools. Woodworking is one of my hobbies. I have a shop with a variety of tools in my home and I make models, dollhouses and furniture.



The Children's Museum of Indianapolis.

Will Elsner at work in the carpentry shop at The Children's Museum.

I used to work in sales and sales management. When I retired, I felt I needed to be active. I also wanted to be useful and help other people. **The Children's Museum** is a wonderful place to volunteer and it is a way to help the community. I always look forward to Tuesdays, the day I work at the museum. I really enjoy the people I work with and using my skills to create something new. So far, one of my greatest accomplishments is building a dollhouse for Playscape, along with George Wagner, another volunteer.

I would like for everyone to understand that retired people have a great deal of knowledge and skills that can be put to use. It's a question of making a commitment. In everything you do, you must make a commitment — to your family, to your job, to being a volunteer.

Five Ws Chart

Who?	What?	When?	Where?	Why?

Create a Classroom Mini-Museum

Getting Started

- Remind students once again of their visit to the museum and the **Nuts and Bolts Journal**. Ask them what artifacts and specimens they saw. Explain that many museums have collections of objects. A **collection** is a group of similar objects. Ask students if they have any collections of their own.
- Show students the photographs of artifacts donated by the Caplan family, page 48. Remind students that people have other treasures to donate besides their time and money. It is very important for museums to receive donations of objects or collections of objects.
- Ask students: Why would people want to donate artifacts, such as a painting, jewelry or a toy to a museum? Do you have any treasured objects that you would consider giving to a museum? Why would you decide to give such a gift?

Choosing a Focus

- Help students examine their goals for a classroom mini-museum. Ask students: What would you want people to be able to see in your museum? What would you want them to learn? What would you want them to be able to do?
- Help students focus on the types of artifacts and specimens that they may want to display. Ask them where the objects would come from. Are there any collections of objects in the classroom that would be interesting to display? Would people be willing to donate or lend objects for the museum?

- Ask students if their museum should have a specific theme. Should they focus on a subject, such as science or art? Should they focus on collection of one type of artifact, such as toys, or one type of specimen, such as insects? To some extent, the museum focus may depend upon the types of objects that can be obtained.

Planning the Museum

- After students have selected a theme or focus for their museum they need to make some economic decisions. Ask students: What is the purpose of this museum? Is it simply for the education and enjoyment of the school community? Should it be a business operated for profit or should it be a nonprofit organization? Do you think that people will be more willing to donate objects to a nonprofit museum or to a business? If you decide to operate the museum as a business, how will you use the profits? If you decide that the museum will be a nonprofit organization, will you still need to charge admission?
- Students will also need to take responsibility for specific jobs. Some students might write letters to parents or grandparents asking if they would be willing to lend an object or a collection of objects for the museum. Other students might want to be curators and help store the objects and keep them safe. Curators will have to devise a classification system and keep careful records so that borrowed objects can be returned to their owners. Some students may want to research the items so that there is good information for labels. Others might want to help write labels or be

exhibit designers by creating display cases from cardboard boxes. Some students will be needed to create publicity posters for the school or an announcement in the school newsletter. Others may want to be guides and interpreters or security guards after the museum opens.

Family Connections

It will be important to keep families informed about the museum project because their help will probably be needed. Family members may have objects or collections that they would be willing to lend for the project. Others may be willing to come to school on opening day and show an especially treasured collection. Families may also have museum experiences and information that they can share. They should also be invited to attend on opening day to enjoy exhibits and help students celebrate all that they have learned.

Opening Day and Beyond

Depending upon classroom space and other projects, you may decide that the classroom mini-museum can be available to visitors over several days or that there will be only one Museum Day. In any case, the museum opening will be a special event that provides students an opportunity to have fun as they demonstrate all that they have learned. Serving as hosts to family members and students from other classes will help students develop self-confidence and communications skills. After the museum event is completed, help students evaluate the project and their performance. Ask them if they had to make tough economic decisions and if jobs turned out to be more difficult than they expected. They may want to add an addendum to the **Nuts and Bolts Journal** to reflect on their mini-museum experience.

The Caplan Collection Toys From Around the World

Frank and Theresa Caplan were the founders of the toy company Creative Playthings. In their travels around the world they collected more than 50,000 folk objects representing more than 90 countries. In 1984 they donated their collection to The Children's Museum and helped to create the Passports Gallery.



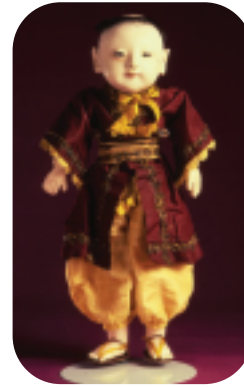
"Tap Tap" Truck, Haiti — painted scrap wood



Circus Set, Germany — wood, cloth and fiber



Puppet, Bamana peoples, Mali — wood, cloth, fiber and animal hair



Ichimatsu (jointed play doll), Japan — molded sawdust, gofun, cloth and horse hair



Helicopter, Mexico — painted gourd and wood



Doll, Ndebele peoples, South Africa — glass beads, seeds and cloth

Credits for all photos: The Children's Museum of Indianapolis

For Students

- Godfrey, Neale S. *Ultimate Kids' Money Book*. New York: Simon & Schuster Books for Young Readers, 1998.
This well-illustrated book introduces students to what money is and how to use it, including planning a budget, spending, saving, investing, banks and credit.
- Konigsburg, E.L. *From the Mixed-Up Files of Mrs. Basil E. Frankweiler*. 1967. New York: Atheneum Books for Young Readers, 2002 ed.
Claudia and her little brother decide to run away from home and stay at The Metropolitan Museum of Art in New York City. As a result, they learn some important lessons about economics and life. This 1968 Newbery Award winner provides an entertaining story and an opportunity to discuss how times have changed.
- Van Leeuwen, Jean. *The Great Googlestein Museum Mystery*. New York: Phyllis Fogelman Books, 2003.
Three mice on an adventure accidentally end up in a museum, where they uncover a mystery and one of them creates a sensation when he decides to become an artist.
- L'Hommedieu, Arthur John. *Working at a Museum*. New York: Children's Press, 1998. Based on the Brooklyn Children's Museum, this book introduces children to several museum professions, including curator, educator, graphic designer, maintenance worker and security officer.
- Tropea, Judith. *A Day in the Life of a Museum Curator*. Mahwah, NJ: Troll Associates, 1991.
The color photographs and text of this book allow children to follow Niles Eldredge, a curator at the American Museum of Natural History in New York, as he does fieldwork, research and writing.
- Weil, Lisl. *Let's Go to the Museum*. New York: Holiday House, 1989.
This nonfiction book introduces children

to different types of museums and gives them a hint of the excitement they will experience during a museum trip.

For Teachers

- **Indiana Council for Economic Education (ICEE)**
Purdue University
Agricultural Administration Building
615 W. State Street
West Lafayette, IN 47907-2053
(765) 494-8545
Web site: www.econed-in.org
The ICEE is a nonprofit educational organization located at Purdue University. It provides economic education training, materials and consulting assistance to Indiana educators. Through a statewide network of 13 regional university centers, ICEE offers a range of teacher workshops and institutes, many of them providing academic credit. Visit the Web site to learn about scheduled professional development opportunities, student activities, events and teaching resources. Each year the organization holds the "A Picture is Worth a Thousand Words" contest, which selects student artwork to illustrate economic concepts in a yearly calendar:
www.kidseconposters.com
- **National Council for Economic Education (NCEE)**
1140 Avenue of the Americas
New York, NY 10036
(800) 338-1192
Web site: www.ncee.net/4
This national organization works closely with state economics education councils to provide teacher professional development and teaching materials. Visit the NCEE Web site to learn more about a variety of resources for elementary classrooms, such as: *Econ and Me*, *Play Dough Economics*, *Teaching Economics Using Children's Literature* and *The Classroom Mini-Economy*. NCEE also provides a Web-based version of the National Standards in economics. The link "View the Standards" provides terms and concepts students should learn along with relevant lessons: www.ncee.net/ea/standards

Also from NCEE:

- Hopkins, Martha. *Financial Fitness for Life, Talking to Your Kids About Personal Finance*. New York: National Council on Economic Education, 2002.
These Grades K — 5 materials assist parents in teaching their children about money.
- Suiter, Mary C. *Financial Fitness for Life, Steps to Financial Fitness, Student Workouts*. New York: National Council on Economic Education, 2001.
These materials were developed to teach students in Grades 3 — 5 about the importance of money and how to handle it. A K — 2 version and teacher guides are also available.
- **Youth Philanthropy Initiative of Indiana (YPII)**
32 East Washington St., Ste. 1100
Indianapolis, IN 46204
(317) 715-6709
Web site: www.ypin.org
YPII is a partnership among a number of state organizations that have the common mission of helping young people to become "philanthropists who give of their time, talent and treasure for the common good." The goal of the organization is to encourage youth to reach their full potential while they help the community. See the YPII Web site for links to youth philanthropy programs around the state, an opportunity to sign up for an electronic newsletter and free, downloadable resources.

Other Web Sites:

- **EconEdLink: www.econedlink.org**
This site is part of the National Council for Economic Education and MarcoPolo consortium and provides a new economics lesson plan each month, current-events lessons, links to other sites and a Cyberteach guide to teaching economics via the Web.

apprentice — a person who works with a more experienced person in order to learn how to do a job

artifact — an object made or changed by humans

benefit — something that promotes or enhances well-being; an advantage

budget — a plan using income for a particular purpose or purposes

charity — an organization that provides relief or services that help the public; the act of providing help or assistance

civic leader — a prominent person in community life

collection — a group of objects that have something in common and that are intended to be seen, studied or kept together

collector — a person who collects objects

common good — the general well-being of a community

cost — an expenditure or amount paid, such as time or labor

curator — a person who researches and takes care of artifacts or specimens and helps explain these objects to viewers

donate — to present as a gift to a fund, cause or organization; to contribute

endowment — a fund that is established to produce a permanent source of income

electrician — a person who installs, maintains, repairs or operates electrical equipment and circuitry

exhibit — to put something on public display; a display of an object or collection of objects

exhibit designer — a person who works with the three-dimensional aspects of an exhibit space and creates its overall “look”

exhibit developer — a person who works with the content of an exhibit and writes labels to convey the message or main ideas

funding — money set aside for a purpose

gallery — a building or an area of a building where artifacts, artworks and specimens are on display

goods — objects, such as a book or a toy, that satisfy someone’s wants

graphic artist — an artist who works primarily with drawing, painting, engraving, typography or printing

income — money received in exchange for goods and services

interdependence — to provide goods and services that others depend upon and to depend upon goods and services provided by others

mass production — the manufacture of goods in large quantities, often using standardized designs and assembly-line techniques

museum — a building for the public exhibit of artworks, special objects, science exhibits or other displays and activities

nonprofit organization — an organization that provides a benefit to the community and does not operate to make a profit

opportunity cost — in making choices, the next best alternative you do not choose

painter — a person who paints, either as an artist or a worker

philanthropist — a person who donates time, money or other gifts

productive resources —

natural resources: resources that occur in nature and are used in production

human resources: any human effort used in production

capital resources: goods, such as tools, buildings and machines, used to produce other goods and services

productivity — the number of goods and services produced in a period of time divided by the productive resources used

profile — a biographical description of a person’s most noteworthy characteristics and achievements

profit — the amount of money that is left after paying for the cost of producing a good or service

scarcity — the idea that resources are limited in relationship to people’s wants

sculptor — an artist who produces three-dimensional artworks

services — actions that someone does for someone else, such as dental care or trash removal

specialization — to specialize in providing a specific type of good or service, which usually increases productivity

specimen — an object from nature

volunteer — a person who performs or offers to perform a service voluntarily without earning money for the goods or services provided

Economics K – 8

Standard 1 — Productive Resources: Students will understand that productive resources are limited. Therefore, people cannot have all the goods and services they want. As a result, they must choose some things and give up others. Students will use this knowledge to identify what they gain and what they give up when they make choices.

Standard 2 — Effective Decision-Making: Students will understand that effective decision-making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are all-or-nothing decisions. Students will be able to use this knowledge to make effective decisions as consumers, producers, savers, investors and citizens.

Standard 6 — Specialization: Students will understand that when individuals, regions and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase. Students will be able to use this knowledge to explain how they can benefit themselves and others by developing special skills and strengths.

Standard 11 — Money: Students will understand that money makes it easier to trade, borrow, save, invest and compare the value of goods and services. Students will be able to use this knowledge to explain how their lives would be more difficult in a world with no money or in a world where money sharply lost its value.

Language Arts K – 12

Standard 3 — Reading Comprehension: Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, interactions with other readers and writers, knowledge of word meaning and of other texts, word identification strategies and understanding of textual features.

Standard 4 — Communication: Students adjust their use of spoken, written and visual language (e.g., conventions, style and vocabulary) to communicate effectively with a variety of audiences for a variety of purposes.

Standard 5 — Writing Strategies: Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Standard 7 — Inquiry: Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts and people) to communicate their discoveries in ways that suit their purpose and audience.

Standard 8 — Informational Resources: Students use a variety of technological and informational resources (e.g., libraries, databases, computer networks and videos) to gather and synthesize information and to create and communicate knowledge.

Mathematics 3 – 5

Number and Operations:
Standard 1 — Students understand the meaning of operations and how they relate to each other. (Benchmark: Students understand the effects of multiplying and dividing whole numbers.)

Standard 3 — Students compute fluently and make reasonable estimates. (Benchmark: Students develop fluency in adding, subtracting, multiplying and dividing whole numbers.)

Algebra:
Standard 1 — Students understand patterns, relations and functions. (Benchmark: Students represent and analyze patterns and functions using words, tables and graphs.)

The EconKids



Penny Saver



Dollar Dog and Calvin Cash



Bud Budget

“Economics is Everywhere!”