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# Allen Percy Green

## A.P. Green Fire Brick Company and A.P. Green Industries, Inc.

By M. Karen Hubbard

### LESSON DESCRIPTION

Students read a story about entrepreneur, Allen Percy Green who founded a fireclay plant in Mexico, Missouri. Students learn how important location is when locating a business. In a follow-up activity, students notice how many different pieces need to come together to start a business.

### ECONOMIC CONCEPTS

- entrepreneur
- natural resources
- capital resources
- human resources
- entrepreneurial ability
- what to produce
- how to produce
- for whom to produce

### RELATED CONCEPTS

- reading comprehension
- geography

### MATERIALS

- One copy of “Allen Percy Green” reading for each student
- Transparency of Visual 1 – “Three Basic Questions”
- One copy of Activity 1 – “Stack the Bricks” for each student
- Missouri map (optional)
- World map or globe (optional)

### TIME

45 minutes

### PROCEDURES

1. Read the story about Allen Percy Green and instruct students to look for details about why location was important for his company.

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2. Discuss the following questions:
    - a. What did Allen Percy Green's company produce? (fire brick for furnaces used to make steel and glass)
    - b. Why did he choose to produce this product? (He realized that industries revolving around iron, steel, and other similar products were growing and so was the need for firebrick.)
    - c. Where was his company located? (Mexico, Missouri)
    - d. Look on a Missouri map. In what part of Missouri is Mexico located? (northeast)
    - e. Why was Mexico, Missouri, a particularly good location for his company? (the area provided the largest amount of fireclay and other similar materials in all of Missouri. The area is also considered to be the largest reserve of plastic and semi-plastic clays in the entire world.)
  
  3. Point out that all businesses use resources to produce products. There are many kinds of resources, but they can all be separated into four general categories.
  
  4. Explain that **natural resources** are things found in and on the earth that are used to produce goods and services. Some examples of natural resources include water, coal, and oil. Ask the following question:

What natural resource is used in the production of fire bricks?  
(fireclay)
  
  5. Explain that **capital resources** are goods made by people that are used to produce goods and services. Capital resources include tools, buildings, and equipments. Some examples of capital resources are hammers, computers, and schools. Ask the following question:

What capital resource is used in the production of fire bricks?  
(fireclay plant)
  
  6. Explain that **human resources** are people doing mental and physical work to produce a good or service. Some examples of human resources include a teacher, a firefighter, a doctor, and a lumberjack. Ask the following question:

What human resources are used in the production of fire bricks?  
(the plant workers)
  
  7. Explain that there is one category of resources that guided the way all other resources were going to be used at A.P. Green Fire Brick Company. That resource was A. P. Green himself. He had entrepreneurial ability. **Entrepreneurial ability** is another category of resources. It is the special skill of an individual entrepreneur who is willing to take risks to develop new products and start new businesses. An **entrepreneur** is a person who controls the production process of a business, makes business-policy decisions, attempts to be innovative in new products or methods of
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- production, and bears the risk of their time, effort, and funds invested in the business.
8. Explain that as an entrepreneur, A.P. Green had to answer three basic questions.
  9. Display Visual 1 – “Three Basic Questions.” Explain that entrepreneurs must answer three basic questions as they begin their businesses. Discuss each point as follows and record responses.
    - a. What to produce

What product did A.P. Green produce? (fire bricks)  
Why did he think he would find buyers for fire bricks?  
(businesses needed bricks that could withstand very high temperatures)
    - b. How to produce

What resources would he use in his business? (fireclay, workers, a factory and tools)  
What natural resource did he use? (fireclay)  
What capital resource did he use? (the factory)  
What human resources did he use? (factory workers)
    - c. For whom to produce

Who would his customers be? (steel producers, glass producers, lead producers, iron producers, electricity producers)  
In what countries did A.P. Green Industries sell its product?  
(the U.S., Canada, Mexico, United Kingdom, and Indonesia, for example)
  10. Distribute Activity 1 – “Stack the Bricks” to each student. Tell students that these bricks represent the “steps” Mr. Green took to start his business and become an entrepreneur. Direct the students to select an answer from the Answer Box to fill in each brick correctly.
  11. Display a world map or globe. Call on individual students to come forward to locate a country in which A.P. Green sold its product and identify the continent in which that country is located.

United States – North America	United Kingdom – Europe
Canada – North America	Indonesia – Asia
Mexico – North America	
  12. End the lesson by reminding the students that, for Mr. Green, location was very important for his business because it had the natural resources he needed to produce the products.
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## **VISUAL 1 – THREE BASIC QUESTIONS**

As an entrepreneur, A.P. Green had to answer three questions.

What to produce

How to produce

For whom to produce

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## ACTIVITY 1 – STACK THE BRICKS

Name \_\_\_\_\_ Date \_\_\_\_\_

Answer the Three Basic Questions by using the words below.

glass producers	fire bricks	human resources
capital resources	lead producers	electricity producers
iron producers	natural resources	steel producers

What to Produce

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How to Produce

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For Whom to Produce

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## ACTIVITY 1 - ANSWERS

### Stack the Bricks

Answer the Three Basic Questions by using the words below.

glass producers	fire bricks	human resources
capital resources	lead producers	electricity producers
iron producers	natural resources	steel producers

#### What to Produce

fire bricks
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#### How to Produce

natural resources	capital resources	human resources
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#### For Whom to Produce

glass producers	lead producers	electricity producers	iron producers	steel producers
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# **Allen Percy Green**

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Allen Percy Green was 35 years old when, in 1910, he moved to Mexico, Missouri, and founded the A. P. Green Fire Brick Company. Under Mr. Green's leadership, the company was incorporated in 1915, and by 1937, his company had become the world's largest fireclay plant. Fireclay is a type of clay that is able to hold up against extreme heat without becoming damaged. This characteristic makes fireclay very useful in melting iron to make steel or melting silica sand to make glass. Green's company would form the fireclay into bricks, and the bricks would be used as a lining in the furnaces used to make steel and glass. As industries revolving around iron, steel, and other similar products grew, so did the need for firebrick. The firebricks were necessary for companies that produced glass, steel, iron, lead, and even electricity.

Green's choice of location turned out to be a very wise decision. The Mexico area provides the largest amount of fire brick and other similar materials in all of Missouri, and the state of Missouri ranks second in the industry among all states in the country. The Mexico area is also considered to be the largest reserve of plastic and semi-plastic clays in the entire world.

The company operated in the United States, Canada, Mexico, the United Kingdom, and even Indonesia. In 1997, A. P. Green's company reported revenues of about \$280 million. In 1998 though, Global Industrial Technologies bought A. P. Green Industries, Inc. for about \$195 million.

Allen Percy Green and his company did quite well in providing products for other companies that needed those products so that they could make their own. The firebrick from Mexico is even today used in the launch pads for space shuttles at Cape Kennedy. Green shows us that location is extremely important to the entrepreneur. He chose the location with the greatest amount of the materials needed for his business. His experience with location should be a lesson for all entrepreneurs.