Capital Builds Output

Trace how productive equipment can affect GDP per person.

SS7E9.c "Explain the relationship between investment in capital goods (factories, machinery, and technology) and gross domestic product (GDP per capita)."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each capital good, circle each phrase that tells how output or productivity changes, and number 1, 2, and 3 beside one chain from capital investment to higher GDP per capita.

From Equipment to Output

1. In Vietnam, a clothing company may replace hand-cutting tools with computer-guided cutting machines. The machines are capital goods, items businesses use to produce other goods or services. A factory building, delivery truck, irrigation pump, and software system can also be capital goods. Workers still matter, but useful equipment can help each worker make more products in the same amount of time. This increase in output is called higher productivity. It can lower waste and make production more reliable.

2. Consider a factory in China that makes batteries for electric buses. If it invests in safer machinery and testing technology, it may produce more reliable batteries with fewer defects. When businesses across a country produce more final goods and services, the country's GDP can rise. GDP per capita is GDP divided by the number of people. If GDP rises faster than population, GDP per capita usually rises, showing more output per person on average. It does not show how income is shared.

3. Investment has costs and risks. A government or business might borrow money to build a factory, train workers to operate new machines, or install internet networks. The investment raises GDP per capita only if the capital is used well enough to increase valuable production over time. Broken machines, poor training, or products that people do not want may limit the gain. In many Southern and Eastern Asian economies, investments in factories, machinery, and technology can support productivity and higher GDP per capita.

2 ANSWER WITH EVIDENCE

Use the passage

1. How do the computer-guided cutting machines help the Vietnamese clothing company's workers?

2. Explain how a factory's investment in machinery or technology can help raise a country's GDP.

3. What must happen for rising GDP to usually raise GDP per capita?

4. Name two problems that may limit the effect of capital investment on GDP per capita.

3 YOUR TURN

Your own words

Create a realistic example from a Southern or Eastern Asian country. In 3 or 4 sentences, name a capital good a business buys, explain how it could increase productivity, and explain when GDP per capita could rise.

ANSWER KEY

Capital Builds Output

GRADE 7 · SS7E9.c

PART 1 · READ AND MARK

Underline each capital good, circle each phrase that tells how output or productivity changes, and number 1, 2, and 3 beside one chain from capital investment to higher GDP per capita. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How do the computer-guided cutting machines help the Vietnamese clothing company's workers?	**They help each worker make more products in the same amount of time, increasing productivity.**
2	Explain how a factory's investment in machinery or technology can help raise a country's GDP.	**The investment can increase the production of final goods and services. More final output can raise GDP.**
3	What must happen for rising GDP to usually raise GDP per capita?	**GDP must rise faster than the population.**
4	Name two problems that may limit the effect of capital investment on GDP per capita.	**Any two: broken machines, poor worker training, or products that people do not want.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A rice mill in the Philippines buys automated drying machines. The machines help workers dry more rice with less waste each day. If the added final output helps national GDP grow faster than population, GDP per capita can rise.

Accept other accurate examples of a capital good and a clear cause-and-effect chain from investment to productivity or output, GDP, and GDP per capita. Students should state that GDP must grow faster than population, or express the same idea.