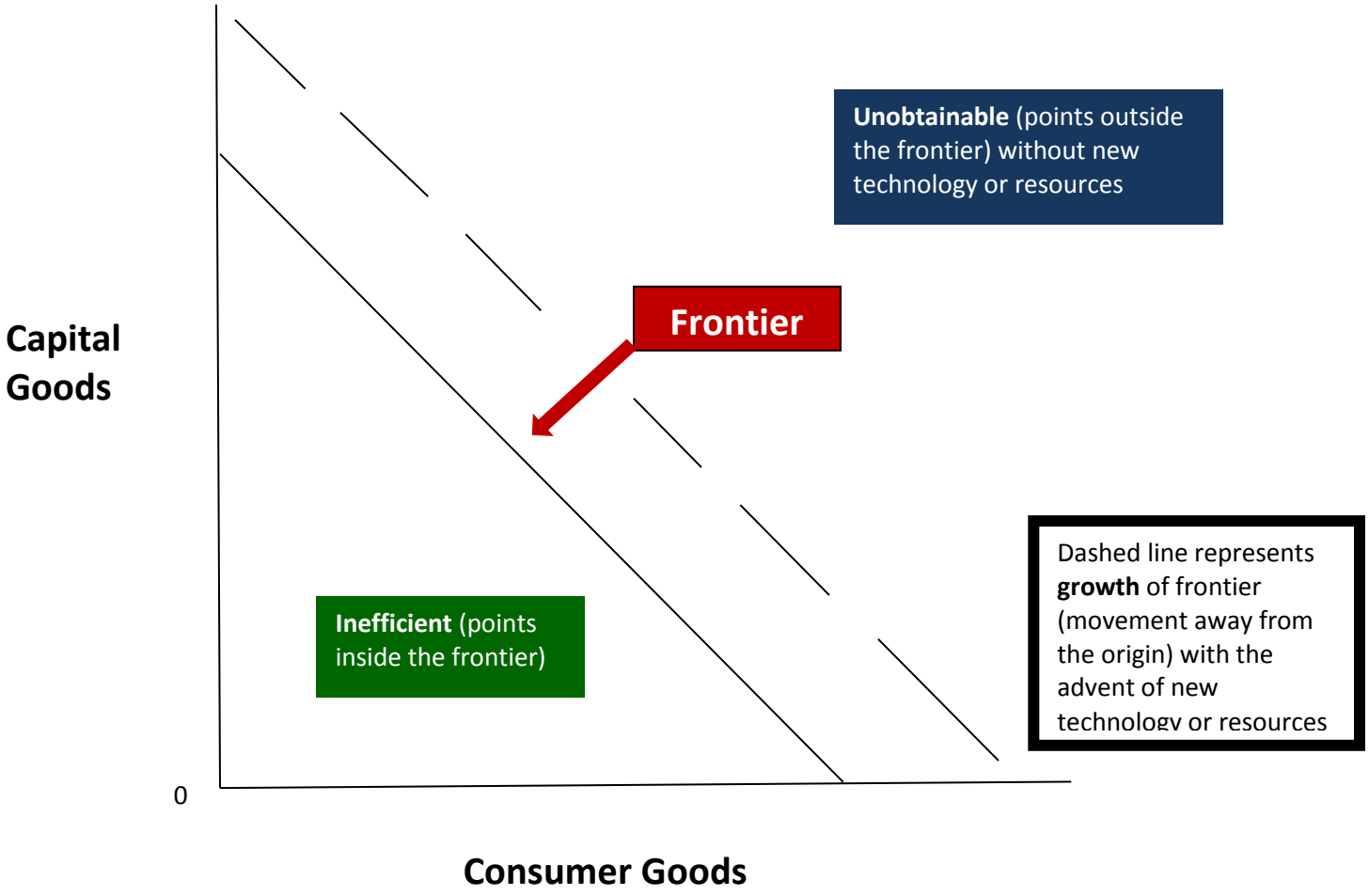
Lesson Graphic Organizer

PRODUCTION POSSIBILITIES CURVE OR FRONTIER



Big Idea Card

Big Ideas of Lesson 4, Unit 1
• Economists often use models in general to illustrate an abstract concept. A **production possibility curve or frontier (PPC or PPF)** is a model useful for illustrating the problem of scarcity and helping make choices. • The **production possibility curve or frontier (PPC or PPF)** represents maximum possible combinations of the two goods without new technology or growth. Points inside the curve represent inefficient use of resources available to a society at that time. Points outside the curve are unattainable under present conditions. • When you move along the PPC/PPF to gain more of one resource, there is an opportunity cost. The optimal or best product-mix will be some point on the PPC/PPF, but the exact point depends on society. It is a normative decision because it will be based on people's values. • Not all resources are interchangeable. As people switch from one resource to another in the production of a good or service, the opportunity cost of using each resource is not same. This can be seen in a PPC/PPF that is bowed out from the origin as opposed to a PPC/PPF that is more of a straight line. This is known as the **Law of Increasing Opportunity Cost**. • Using resources to produce consumer goods and services promotes less growth than using the resources to produce capital goods or to invest in technological advances. Education represents a choice for future growth and future goods over the consumption of present goods. • To grow the PPC/PPF, a society will need more technology or resources. A nation can avoid the limits of its PPC /PPF through international specialization and trade. Specialization and trade have the same effect as having more or better resources with improved technology.

Word Cards

Word Cards from previous lessons needed for this lesson:

- **scarcity** – Word Card #4 from Lesson 1
- **choice** – Word Card #5 from Lesson 1
- **opportunity cost** – Word Card #6 from Lesson 1
- **resources** – Word Card #7 from Lesson 1

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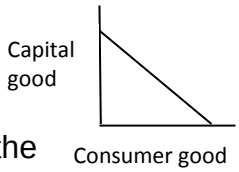
Production Possibility Curve or Frontier



a simple model showing the alternatives of goods and services which a society can produce when it is using all of its resources fully and efficiently

Example: The economist used a production possibility curve to illustrate all choices possible between two goods such as bread or tractors.

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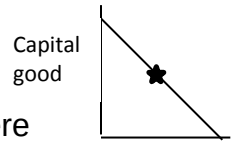
economic efficiency



a point chosen somewhere on the PPC/PPF indicating use of all resources

Example: A society reaches economic efficiency when they choose some combination of consumer goods and/or capital goods and use all given resources.

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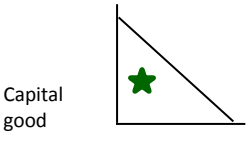
inefficient



a point somewhere inside the PPC/PPF indicating underemployment or unemployment

Example: If a country passed a law stating people born in the State of Michigan were not allowed to work, the nation would be inefficient because of the idle human resources.

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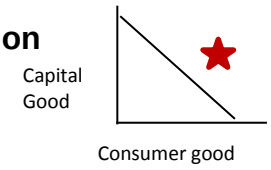
unobtainable combination



A point somewhere outside the PPC/PPF that cannot be attained as the nation/business does not have the available resources to produce at that level

Example: If a country had a choice of 10 capital goods or 10 consumer goods but wanted 20 of both, this would indicate a lack of resources or a need for economic growth.

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normative decision

when the ultimate decision is grounded in facts but based on what the decision maker values

Example: Amy's decision to shop at Target instead of Walmart was a normative one because she was willing to pay a higher price for a product since she does not like the way Walmart treats its employees.

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positive economic decision

decisions that are based on facts and rationality; where the decision maker uses what is and has been occurring in the economy as the basis for the economic decision

Example: Fred made a positive economic decision in determining what he was willing to pay for the house.

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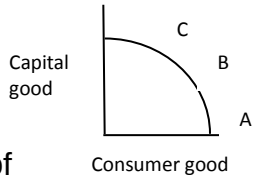
law of increasing opportunity costs



the principle that costs of production will increase by the inefficient reallocation of specialized resources for the production of additional goods for which the resources are not well suited

Example: The law of increasing opportunity demonstrates how the opportunity cost of one good will increase as more of another good is produced and is represented by a bowed line on a graph.

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capital good

goods produced to make other goods

Example: Robots, factories, or computers are all examples of capital goods.

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consumer good

goods produced for general consumption

Example: Pizza, blue jeans, or mp3 players are all examples of consumer goods.

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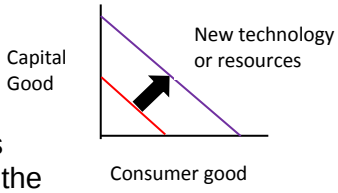
economic growth



an increase in resources or technology that shifts the PPC/PPF curve outwards from the origin

Example: By training people to efficiently and effectively use computers and the internet can lead to economic growth because it allows workers to be more productive and produce more consumer and capital goods.

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Name _____

Date _____ Hour ____

Handout #1: Economic Decision Making

Economics is about making decisions. For example, you may use your time for either studying for class or working at an after-school job. Are there other combinations that you haven't considered? A production possibilities graph could help you make your decision.

1) You have 10 hours of free time each week and must decide how to use them. In the space below, make a list of all the things you would like to do during this time.

2) Now, take a look at your list and write your top two choices:

_____ and _____

3) Which one would you pick to do? _____

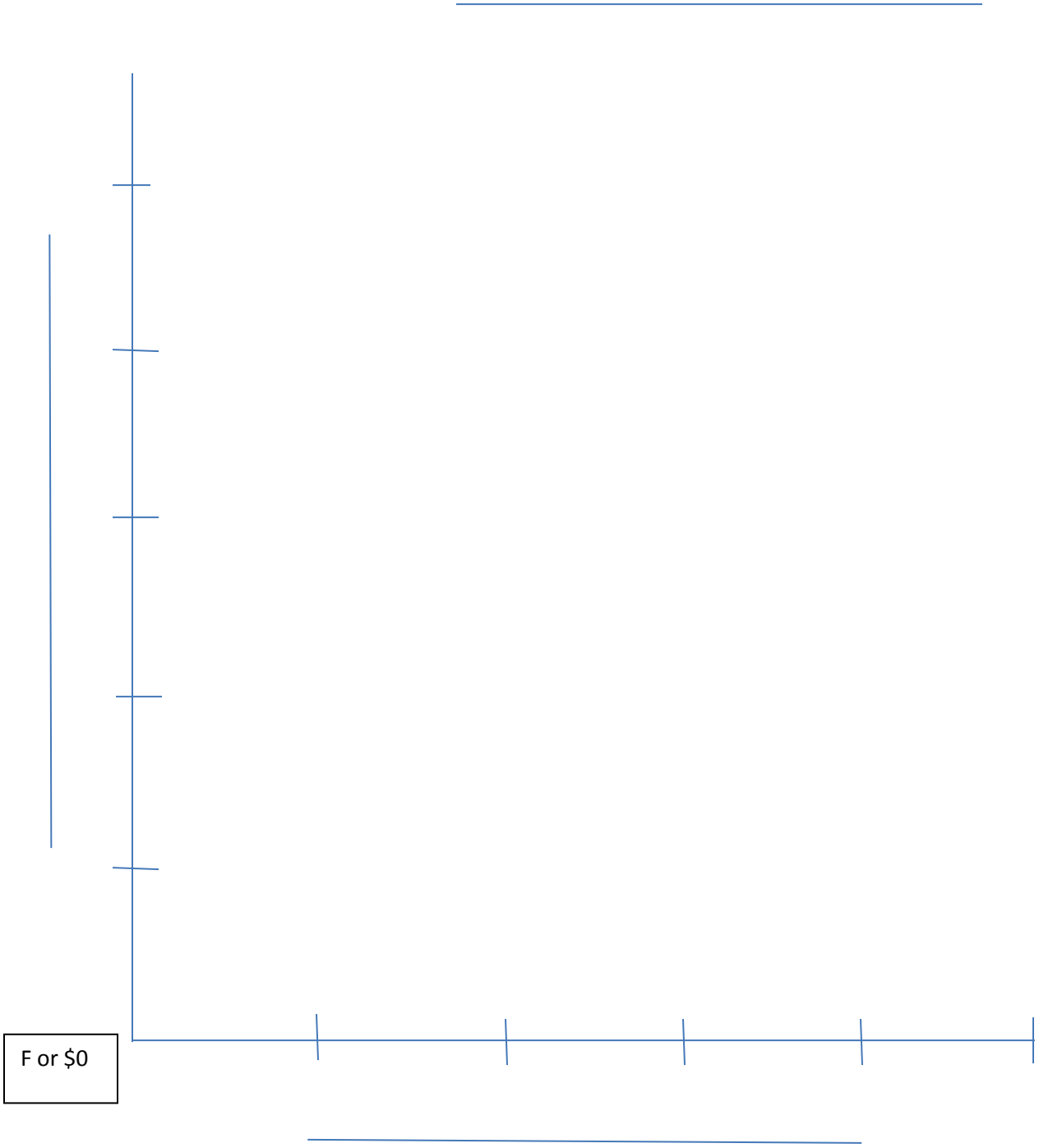
4) That means that your second best choice _____, will become your ***OPPORTUNITY COST***.

5) Now use the following data schedule. Your after school job will pay $10 an hour. You have a total of 10 hours to work with. Calculate the number of hours needed for each choice. Some have been completed for you.

After School Earnings	**Class Grades**
$0 (0 hours)	A+ (___ hours)
$20 (2 hours)	A (___ hours)
$40 (___ hours)	B (6 hours)
$60 (___ hours)	C (4 hours)
$80 (8 hours)	D (___ hours)
$100 (10 hours)	F (___ hours)

6) Describe the story the data above is telling you. What patterns do you notice? Why do you see these?

7) A data schedule can provide specific information, but sometimes a graph can better illustrate the idea. Your teacher will help you to construct the prior data into a PPC/PPF graph.



Part II: PAPER AIRPLANE AND PAPER FOOTBALL PPF

8) Resources available: Your business has 6 pieces of paper to produce either paper airplanes or paper footballs.
What are your production possibilities?

Sheets of Paper	Airplanes	Footballs
6		
6		
6		
6		
6		
6		
6		

9) Now graph your data schedule from above in the space below.