



The Permanent Fund: A Renewable Financial Resource

Essential Question: How do the revenues from Alaska's oil and gas industries provide for Alaskans today and in the future? How does Alaska invest the Permanent Fund and manage it for the long run, as a renewable financial resource? What are the risks/rewards associated with investing and why is it important to diversify your investments?

Grade:
9-12

Time:
One class period

Overview:

Students will demonstrate how the Alaska Permanent Fund is managed as a renewable financial resource for Alaska. Students will learn what investments are and understand the importance of long-term investing and diversification.

Assessment:

Can the student:

- Explain how Alaska uses the Permanent Fund to benefit Alaskans today and save money for future generations?
- Who manages and invests the Permanent Fund?
- Explain what an investment is and why diversification is important?
- Define and give an investment example of a stock, bond, and real estate.

Vocabulary:

Financial Market Report, Investment, Diversification, Long-term Investment, Principal, Bonds, Inflation, Real Estate, Reward, Risk, Stocks, Taxes

TEACHER INFORMATION AND PROCEDURE

The Permanent Fund: A Renewable Financial Resource teacher training

Scan the QR code to watch the teacher training video.



**Scan to view
Teacher Training**

Prior knowledge for students:

Students should be able to articulate the purpose of the Alaska Permanent Fund, and give examples of common investments.

Materials needed:

- "How to Invest" PowerPoint slides: <https://tinyurl.com/yc3nc83v>
- Financial market report cards
 - Play money:
 - \$1,000 per group: 8 x \$100, 18 x \$10, 20 x \$1
 - One bank set per class: mixed denomination pack of play money (e.g., \$340 per class: 20 x \$10's, 20 x \$5s, 40 x \$1's)



**Scan to view
PowerPoint**

What to do in advance:

- Print out 1 set of market cards (laminated optional)
- Separate money into the correct (listed above) amounts for each group.
- Have 4 different colored or labeled bins for each team's money:
 - Cash • Stocks • Bonds • Real estate
- Ask students how the state can afford those expenses. Where does the money come from?





The Permanent Fund: A Renewable Financial Resource

Gear-up:

Ask the students if they earned a lot of money, what would they do with it. Would they spend it all right away? Would they save some for the future, and if so, how much and why? Ask them about other ideas they might have to do with their savings, like investing it to earn more money. Ask them if a state government had savings, what could they do with it?

Have the students brainstorm examples of how a state could use its money. How can they make their savings renewable through investing to be able to use some today and make sure there is always some left for the future? Introduce the concepts of investment and diversification. Discuss the importance of not putting all your money in one place, as well as the potential risk and rewards of each type of investment. Ask students what factors could impact a state's savings and their investments.

Explore:

Students should be placed in the same teams as the previous lesson, and that they again are representing their newly founded state. Explain that the natural resources alone can no longer provide enough to support the state and so they are responsible for investing some of the revenue from natural resources to support the government today and ensure that it can continue to support them in the future. The point of the game is to support your government today while also growing your pool of money each year, and the team with the most money at the end of the game wins.

Year 1

Each team starts with the same amount of money, \$1,000.

Each team can invest as little or as much of their money as they want into the three different investment types (stocks, bonds, and real estate). They can also put money into their savings if they don't want to invest.

The teacher will draw a financial market report card and read it to the whole group. (These cards can be reused if needed). Using this information, the team must calculate how much money their investments made or lost based on how much they had in each type of investment. If they lost money overall, they will pay it to the bank (teacher); if they gained revenue from an investment, the bank (teacher) will pay them.

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$100	-5%	$100 \times 0.05 = 5$	$100 - 5 = \$95$
Bonds	\$400	3%	$400 \times 0.3 = 12$	$400 + 0.3 = 12$
Real Estate	\$300	10%	$300 \times 0.10 = 30$	$300 + 30 = \$330$
Savings	\$200	N/A	N/A	\$200
			Total	\$1,037

AMOUNT GAINED OR LOST (FINAL - INITIAL)

$\$1,037 - \$1,000 = \$37$





The Permanent Fund: A Renewable Financial Resource

For year 2, each team can change their investment allocations if they desire. At the end of the round, students calculate their revenue gained or lost in the same manner as above.

After the 5th year, each team should count their money to see which generated the most investment earnings over the course of the 5 years.

Generalize:

Discuss with the students how the Alaska Permanent Fund through prudent investment, transforms a portion of Alaska's non-renewable resources into a renewable financial resource. The goal is to make sure the Principal is maintained, that the Fund is invested to achieve the maximum returns possible – with as little risk as possible, and to generate consistent revenues to support Alaskans today while ensuring that it can also benefit future generations.

Watch the video "Alaska's Renewable Revenue: Diversification". Scan QR code below.

Extensions, adaptations, and more resources:

Have students research and present how much money the Permanent Fund contributes to Alaska every year. How many people work to manage the Permanent Fund and what types of investments do they make? Discuss how oil revenues (price and production) affect the state's revenue stream, and how the role of the Permanent Fund has evolved over the years to support the state and all Alaskans.



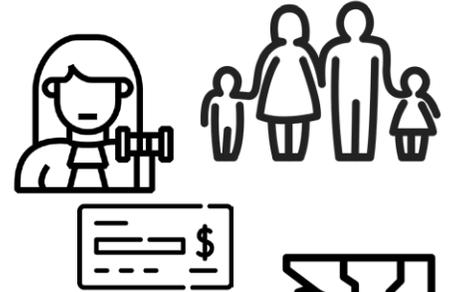
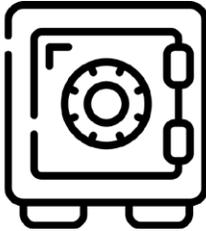
**Scan to view
Video**



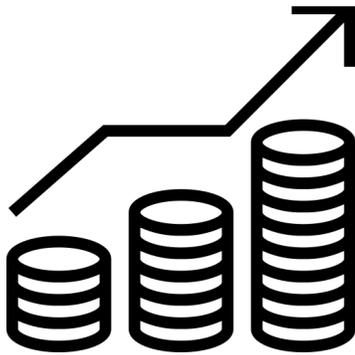


The Permanent Fund: A Renewable Financial Resource Doodle Notes

NAME(S): _____



Investing revenue from Alaska's natural resources for future generations.



1st Deposit 1977 \$734,000
Today's investments worth
over \$80 Billion



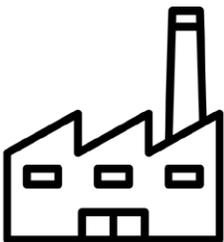
Compound Interest
Interest on top of interest



Risk
Tolerance



"Don't put all your eggs in one basket!"
Diversified Portfolio



Stocks

Partial **ownership** in a company
High Risk / Return



Bonds

Loan to a company or government
with guaranteed rate of return
after a set amount of time
Moderate Risk / Return

Real-estate
Property ownership:
buildings or land
Variable Risk / Return



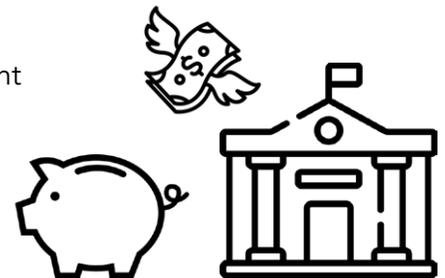
Bull Market

"Boldly charging ahead"



Bear Market

"Running away scared"



Savings

Bank account
Low Risk / [No] Return





The Permanent Fund: Market Report Tracking

NAME(S): _____

SAMPLE			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$100	-5%	$100 \times 0.05 = 5$	$100 - 5 = \$95$
Bonds	\$400	3%	$400 \times 0.3 = 12$	$400 + 0.3 = 12$
Real Estate	\$300	10%	$300 \times 0.10 = 30$	$300 + 30 = \$330$
Savings	\$200	N/A	N/A	\$200
			Total	\$1,037

AMOUNT GAINED OR LOST (FINAL - INITIAL) \$1,037 - \$1,000 = \$37

YEAR 1:

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$			
Bonds	\$			
Real Estate	\$			
Savings	\$	N/A	N/A	
			Total	

AMOUNT GAINED OR LOST (FINAL - INITIAL)

YEAR 2:

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$			
Bonds	\$			
Real Estate	\$			
Savings	\$	N/A	N/A	
			Total	

AMOUNT GAINED OR LOST (FINAL - INITIAL)





The Permanent Fund: Market Report Tracking

YEAR 3:

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$			
Bonds	\$			
Real Estate	\$			
Savings	\$	N/A	N/A	
			Total	

AMOUNT GAINED OR LOST (FINAL - INITIAL)

YEAR 4:

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$			
Bonds	\$			
Real Estate	\$			
Savings	\$	N/A	N/A	
			Total	

AMOUNT GAINED OR LOST (FINAL - INITIAL)

YEAR 5:

			Initial	\$1,000
Investment Type	Investment Amount	Market Report (Gained or Lost%)	Amount Gained or Lost	Value of Account After Market Report
Stocks	\$			
Bonds	\$			
Real Estate	\$			
Savings	\$	N/A	N/A	
			Total	

AMOUNT GAINED OR LOST (FINAL - INITIAL)

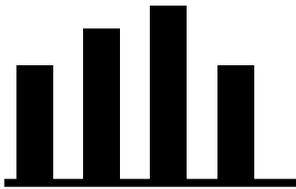




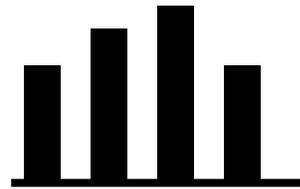
The Permanent Fund:

A Renewable Financial Resource
Market Cards (front)

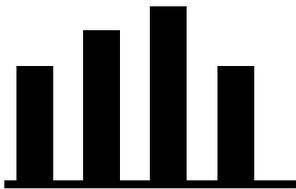
MARKET CARD



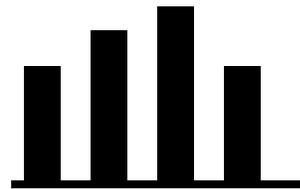
MARKET CARD



MARKET CARD



MARKET CARD





The Permanent Fund:

A Renewable Financial Resource
Market Cards (back)

ANNUAL MARKET REPORT

Stocks: down 5%
Bonds: down 3%
Real Estate: down 10%

ANNUAL MARKET REPORT

Stocks: down 15%
Bonds: down 4%
Real Estate: down 5%

ANNUAL MARKET REPORT

Stocks: down 10%
Bonds: down 3%
Real Estate: up 5%

ANNUAL MARKET REPORT

Stocks: down 10%
Bonds: down 2%
Real Estate: down 2%

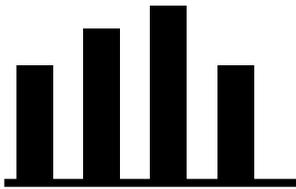




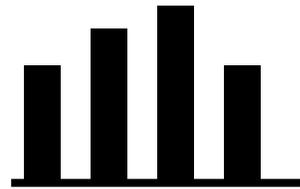
The Permanent Fund:

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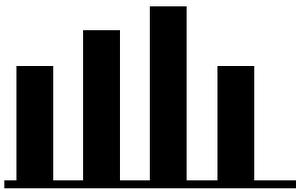
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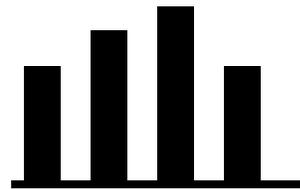
MARKET CARD



MARKET CARD



MARKET CARD





The Permanent Fund:

A Renewable Financial Resource
Market Cards (back)

ANNUAL MARKET REPORT

Stocks: up 5%
Bonds: down 3%
Real Estate: up 2%

ANNUAL MARKET REPORT

Stocks: up 5%
Bonds: up 2%
Real Estate: up 2%

ANNUAL MARKET REPORT

Stocks: down 10%
Bonds: up 3%
Real Estate: down 5%

ANNUAL MARKET REPORT

Stocks: up 10%
Bonds: down 3%
Real Estate: down 5%

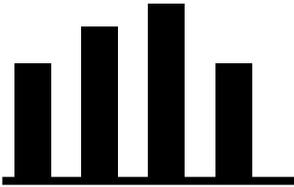




The Permanent Fund:

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Market Cards (front)

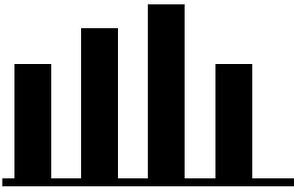
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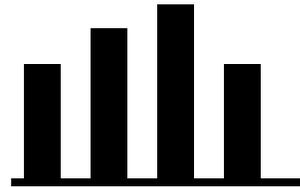
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MARKET CARD





The Permanent Fund:

A Renewable Financial Resource
Market Cards (back)

ANNUAL MARKET REPORT

Stocks: up 15%
Bonds: down 5%
Real Estate: up 10%

ANNUAL MARKET REPORT

Stocks: down 15%
Bonds: up 2%
Real Estate: down 5%

ANNUAL MARKET REPORT

Stocks: up 5%
Bonds: up 3%
Real Estate: up 5%

ANNUAL MARKET REPORT

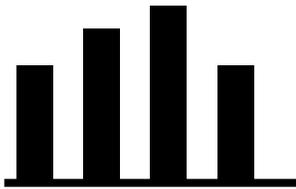
Stocks: up 5%
Bonds: up 3%
Real Estate: up 5%



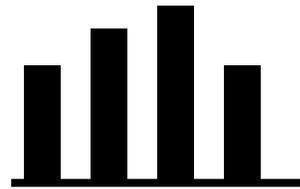


The Permanent Fund: A Renewable Financial Resource Market Cards (front)

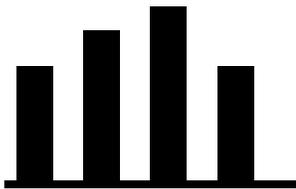
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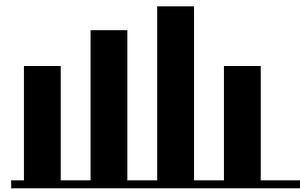
MARKET CARD



MARKET CARD



MARKET CARD





The Permanent Fund:

A Renewable Financial Resource
Market Cards (back)

ANNUAL MARKET REPORT

Stocks: up 5%
Bonds: down 2%
Real Estate: down 1%

ANNUAL MARKET REPORT

Stocks: down 5%
Bonds: down 2%
Real Estate: up 5%

ANNUAL MARKET REPORT

Stocks: down 10%
Bonds: up 3%
Real Estate: down 5%

ANNUAL MARKET REPORT

Stocks: up 10%
Bonds: up 3%
Real Estate: down 10%

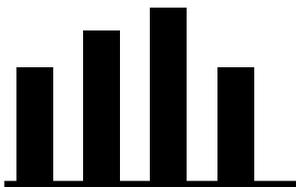




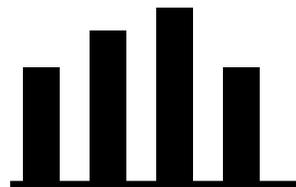
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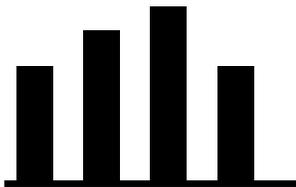
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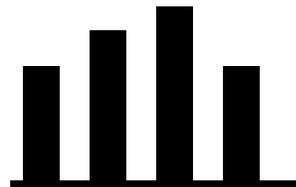
MARKET CARD



MARKET CARD



MARKET CARD





The Permanent Fund:

A Renewable Financial Resource
Market Cards (back)

ANNUAL MARKET REPORT

Stocks: down 10%
Bonds: up 4%
Real Estate: up 10%

ANNUAL MARKET REPORT

Stocks: up 15%
Bonds: down 2%
Real Estate: up 5%

ANNUAL MARKET REPORT

Stocks: down 5%
Bonds: up 3%
Real Estate: down 1%

ANNUAL MARKET REPORT

Stocks: down 5%
Bonds: up 3%
Real Estate: down 1%





The Permanent Fund: Group Money (make one copy per group)





The Permanent Fund: Game Money (make two copies per group)





The Permanent Fund: Game Money (make two copies per group)



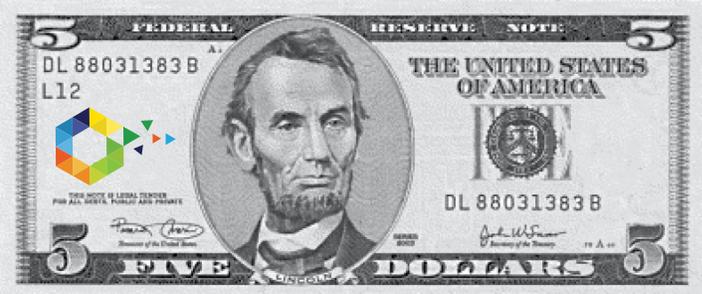
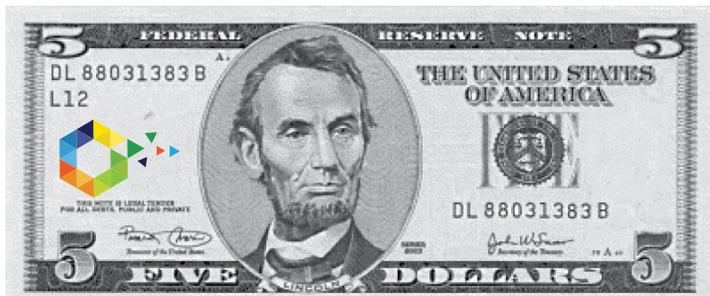


The Permanent Fund: Bank Money (make two copies per class)





The Permanent Fund: Bank Money (make two copies per class)





The Permanent Fund: Bank Money (make four copies per class)

