



Lessons in Oklahoma Personal Finance Standards

*Taking Risks*  
*Grade Level: 7-12*

The Oklahoma Council on Economic Education

*Author*

**Sue Lynn Sasser, Ph.D.**  
University of Central Oklahoma  
Department of Economics

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## Taking Risks

**Grade Level:** 7-12

**Purpose/Overview:** This lesson introduces students to the concept of “risk”. It is designed to help them understand how their own perception of risk can impact their financial behavior. It can be used to engage them in a discussion about gambling and/or about investments.

### **National Economics /Personal Financial Literacy Standards**

Standard V. Students will understand that:

Financial investment is the purchase of financial assets to increase income or wealth in the future. Investors must choose among investments that have different risks and expected rates of return. Investments with higher expected rates of return tend to have greater risk. Diversification of investment among a number of choices can lower investment risk.

### **Oklahoma Curriculum Standards/Personal Finance Standards**

Standard 5: The student will analyze the costs and benefits of saving and investing.

Standard 12: The student will explain and evaluate the financial impact and consequences of gambling.

**Learning Objectives:** After completing this lesson, students will:

- Explain the relationship between risk and potential reward (or loss).
- Compare the difference between risk tolerance and risk aversion.

### **Key Concepts**

Risk - a measure of the likelihood of loss or profit

Risk averse – disliking risk and taking steps to avoid it

Risk tolerance - the amount of uncertainty or possibility of loss the individual can bear

### **Materials:**

1. Two decks of cards. One deck should be equally divided between red and black cards. The second deck should be all red. Keep the two decks separated.
2. Slips of paper or tokens worth 5 points
3. Slips of paper or tokens worth 10 points
4. Each student should have a piece of paper and pen/pencil to record points.

**Time Frame:** One 45 minute class

### **Procedures:**

Opening / Introduction of the Lesson: Why do some people take more risks than others? The answer to that question may help explain the reason some people enjoy gambling activities and others don't. Could it be that “gamblers” are more motivated by the excitement of winning whereas “non gamblers” are more motivated by other values? Understanding the concept of risk-taking and how comfortable we are with risk-taking should help us better understand why some people have a greater tendency to enjoy gambling activities more than others.

Developing the Lesson: Use the following steps to implement this lesson. You may either divide them into two groups, three groups or keep them in one group.

Show students the two decks of cards: one with 50/50 red and black cards and one with 100% red cards. Tell students they will be assigned points based on the decisions they make about the cards.

Round One (or Group One if using two or three groups): Tell students you want them to choose a card from either stack of cards and you will reshuffle the deck of cards after each student makes a choice. Ask each student to choose a card from one of the decks. (Remember, they don't keep the card; they just record their points. The 50/50 deck should be reshuffled after each student makes a selection.)

**Points: 50/50 Deck:** Students choosing from the 50/50 deck will receive 10 points if they select a red card and zero points if they select a black card. **Red Deck:** If they choose to select a card from the all red deck, they will get an automatic 5 points. Have each student record his/her points.

Calculate the percentage of "winning" students (those who drew a red card from the 50/50 deck and received ten points). Ask students to explain why they made the choice to draw from one deck or the other. Did they get a bigger thrill from drawing a red card from the 50/50 deck or from the all red deck?

Ask students to explain the reason for awarding more points for choosing the red card in the 50/50 deck than for choosing a red card in the "red" deck (higher risk has a higher potential for a reward). Help them see the relationship between taking a greater risk to get a greater reward, reminding them that taking the greater risk also has the potential for losing. You could also relate this to some arcade games, those that cost more often have greater rewards, more tickets, bigger prizes (i.e. the claw game, many have electronics now).

Round Two (or Group Two if using two or three groups): Now, combine the two decks and reshuffle the cards. Again, show them the cards in the deck to ensure they understand what you've done. Tell them there's a new scoring rule for this deck: **zero points for a red card and 10 points for a black card.** Now, have each student select a card from the combined deck. (Again, they don't keep the card; just record their points. And, be sure to reshuffle the deck after each student makes a selection).

Calculate the percentage of "winning" students (those who drew black cards and received ten points). Discuss how the percentage of winning students compared with the results of Round One. Ask them to explain how this round made them feel. Was it scary, exciting, etc.?

Again, remind students that taking a higher risk has greater potential for a higher reward.

Round Three (or Group Three if using three groups): In this round, give everyone 10 points. Use the combine deck of cards and show them the cards to ensure they understand which deck you are using. Tell them each card will cost them 10 points. If they select a black card, they will get 10 extra points. But if they select a red card, you will keep their 10 points. Now, have each student select a card from the combined deck. (Again, they don't keep the card; just record their points. And, be sure to reshuffle the deck after each student makes a selection).

Calculate the percentage of "winning" students (those who drew black cards and received ten points). Discuss how the percentage of winning students compared with the results of Round One. Ask them to explain how this round made them feel. Was it scarier, more exciting, etc? How did they feel about having their points taken away if they got a red card?

If they really enjoyed the thrill of trying to win, it could mean they have a greater risk tolerance than those who felt uncomfortable selecting a card. People who are risk averse probably won't enjoy gambling activities as much as those who have a higher risk tolerance.

Ask students if they would have made the same decision if you changed the potential amount they could win or lose. For example, would they make the same choice if you rewarded them with 10 extra points but required them to give up 20 points if they lost.

In this round, students can begin to see that all choices have potential costs and potential benefits. In order to take a greater risk, people need to believe there is the potential for a greater reward. Even risk averse people can be persuaded to take higher risks if the potential reward is also higher. The amount of risk that people are willing to take depends on their "risk personality" as well as the potential gain or loss.

Concluding the Lesson: Gambling is a past time for many individuals, and some get really caught up in the excitement of casino games, horse racing, scratch cards and other forms of betting. Gaming has become one of the fastest growing segments of the entertainment industry in the United States. However, like other "past times", the inability to control the thrill of gambling can become addictive and cause financial hardships for individuals and families. It is important to note, of course, that not everyone who has a high level of risk tolerance will enjoy gambling or face the potential of becoming addictive to it.

**Assessment:**

Ask students to complete the following statement: One of the most important things I learned about myself from this activity is...

**Assessment Rubric / Answer Key:**

Answers will vary. You may need to remind students to reflect back on their feelings as they were participating in the activity and/or observing others making when making their choices.

**Extension and Enrichment:**

As a general rule, people's perception of risk is rather constant when predicting their overall behavior. Have students complete one of the risk tolerance quizzes (or one that you may choose). Have them write a short paper explaining how their results compare with the feelings they encountered when playing the card game in this lesson. Ask them to discuss how their perception of risk might impact their potential gambling behaviors as well as their potential investment behavior.

<http://www.bankrate.com/brm/news/investing/20011127a.asp>

[Investment Risk Tolerance Quiz - North Dakota State ...](#)

[www.ag.ndsu.edu/.../wall-street/03%20Risk%20Tolerance%20Quiz.pdf](http://www.ag.ndsu.edu/.../wall-street/03%20Risk%20Tolerance%20Quiz.pdf)