



Mini-Unit Games of Chance

Student Activity Packet

UNIT: GAMBLING AND SPORTS BETTING

Name:

Students will be able to:

- Define games of chance and identify various types of gambling activities
- Summarize the history of gambling and its evolution over time
- Explain the basic math behind house edge and probability in simple casino games, such as roulette and slot machines



INTRO

PROMPT:

Use the space below to answer the prompt.

1. **Take a look at the table below. If you have ever engaged in this type of activity, circle Yes. Otherwise, circle No. Then, put a check mark next to each activity that you consider gambling.**

Activity	Have you ever done this?	Put a check mark (✓) next to each activity that you consider gambling
Using an online casino	Yes No	
Participating in a fantasy sports leagues	Yes No	
Collecting cards for games like Pokemon or Magic: The Gathering	Yes No	
Placing a wager on a sporting event	Yes No	
Buying a 50/50 raffle ticket	Yes No	
Made a casual bet with your friends	Yes No	
Betting on a pop culture event (like who is going to win at the Oscars)	Yes No	

Playing scratch-off lottery tickets	Yes No	
Entered a poker tournament	Yes No	
Opening loot boxes in video games		
Buying cryptocurrency	Yes No	
Entered a drawing at a local business	Yes No	

LEARN IT

VIDEO: [Crash Course Games: Gambling \(Part 1: What is Gambling?\)](#)

Before we can get into a discussion about gambling, we first need to understand what gambling is. Watch the video that explains the basics of gambling. Then, answer the questions.

- 1. What is gambling?**
- 2. Casinos set up the rules of the games to ensure that they have a slight (circle one) *advantage/disadvantage* known as the house edge.**
- 3. Why do casinos allow players to throw dice or cut cards themselves, and how does this affect the players' perception of their control over the game?**

VIDEO: [Crash Course Games: Gambling \(Part 2: The History of Gambling\)](#)

Gambling has been a part of human history for thousands of years and perceptions about gambling have also changed over time, influenced by cultural and societal attitudes. Watch the video on the history of gambling. Then, answer the questions.

- 1. True or False: Some universities in colonial America were initially funded by lotteries.**
- 2. Was the banning of gambling in the 19th century an effective way to deal with the problems associated with it? Why or why not?**

3. What might the potential pitfalls of using lottery and casino revenue to fund public services be?
4. 86% of adults reported gambling at some point in their life. Why do you think gambling is so popular?

ARTICLE: [Why The House Always Wins](#)

Casinos, lotteries, and sports betting sites design games to ensure they make a profit in the long run. By understanding concepts like probability and expected value, you'll see why the odds are always in the casino's favor. Read the article. Then, answer the questions.

1. Explain how house edge ensures that casinos always make a profit.
2. Let's look at a standard casino game: roulette. In roulette, you place bets that the ball will land in a specific slot. On a roulette wheel, there are 18 red slots, 18 black slots and 2 green slots.



- a. What is the probability that you will win if you place a bet that the ball will land in a red slot?
- b. In roulette, if you bet \$1 on red and the ball lands on red, you win \$1. However, if the ball lands on either black or green, you lose your \$1 bet. Use the table to help find the expected value of this game. Then, complete the statement below the table.

Event	Probability	Outcome	Expected Value
Red			
Black or Green			
Total			

On average, someone will (circle one) win/lose \$ _____ every time they bet on red.

3. **Why do you think people still gamble even when they know the games are set up for them to lose?**



DO IT

ACTIVITY: CALCULATE: House Edge

Now that you understand why the “house always wins”, let’s see how it works in practice. Follow the directions on the worksheet to complete this activity.



EXIT TICKET

Follow your teacher’s directions to complete the Exit Ticket.