



## PLAYING TO LOSE: WHAT IS GAMBLING?

A 2026 Common Sense Media [study](#) of more than 1,000 US boys ages 11 to 17 found that 36% had gambled in the past year, and that 64% of those who gambled did so inside video games. For this generation, games are the most common first introduction to gambling. Gambling disorder is the only behavioral addiction the American Psychiatric Association recognizes as a diagnosable condition in the DSM-5, the manual clinicians use to diagnose mental disorders. General screen time and social media use are not, as yet, diagnosable conditions.



In this lesson, students learn to recognize gambling in its many forms—including the gambling mechanics built into games they may already play. Many students open “loot boxes” or make “gacha pulls” without realizing these features share the core characteristic of gambling: paying real money for an uncertain reward. Students need a clear way to identify these features before they can think critically about them. This lesson builds that framework, then applies it to three types of experiences students may encounter in games.

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## KEY STANDARDS

ISTE Standards: Digital Citizen (1.2.b), Knowledge Constructor (1.3.d).

CASEL Competencies: Self-Awareness, Self-Management, Responsible Decision-Making.

CCSS.ELA-LITERACY: SL.8.1, SL.8.2, L.8.6; SL.9-10.1, L.9-10.6; SL.11-12.1, L.11-12.6.

## LEARNING OBJECTIVES

Students will...

- ✓ Define gambling using a four-part framework and apply it to real examples.
- ✓ Distinguish among three types of gambling-related experiences in gaming by applying the four-part framework.
- ✓ Analyze their own decisions during a simulated loot box activity and identify design mechanisms that influenced them.

*Teacher note: You do not need to know anything about the games referenced in this lesson. Ask your students to explain them; they are usually glad to, and their experience is a genuine asset here. We do suggest looking at the Activity and Terms To Know before class. The Activity requires a deck of playing cards and runs more smoothly if you familiarize yourself with the game in advance. On game ratings: Most titles here are rated E or E10+ by the ESRB, the US video game rating board. Fortnite is rated T (Teen, 13+) and is included because students will recognize it, not as an endorsement. Individual Roblox games are not rated by the ESRB.*

## INTRODUCING THE LESSON

Ask students if they have played or heard about: *Roblox, Fortnite, EA Sports FC, Minecraft, Stardew Valley, or any mobile game with a spin mechanic, loot chest, or limited-time offer.* Take a show of hands or use a polling tool. Then ask: *In any of these games, have you ever spent money, or been tempted to spend money, on something without knowing exactly what you would get until after you paid?* Take a brief share-out. Keep the discussion judgment-free.

Next ask: *Has anyone ever played a casino-style minigame inside a video game—a slot machine or card table that uses in-game coins, not real money?* Take a few responses, then transition to the lesson by asking a question that most people assume they already know the answer to: *What is gambling?* Students will likely respond with things like “betting money” or “games at a casino.” Explain that most people, including adults, find gambling surprisingly hard to define precisely—and that being able to recognize it is what makes it possible to think clearly about it.

## THE LESSON

1. Screen [Video 1].
2. Distribute the Student Packet. Students can refer to it for the terms used in this lesson, and they will need it for the Activity.
3. Review the four questions from the video. The first three are the elements gambling laws look for. The fourth is not a legal element. This lesson adds it because it explains why some systems are so effective at keeping people engaged.
  - Did I put something real at risk? (Consideration) This includes real money, or anything purchased with real money. In-game currency still counts, even though it does not look like money. Robux and V-Bucks cost real dollars. When a player spends \$10 on gems and then uses those gems to open a loot box, real money is at risk. The conversion into a different currency is part of the design, because it makes spending feel smaller and more abstract than it actually is.
  - Does luck decide the outcome? (Chance) Some players feel like their timing or strategy makes a difference, but if a random number generator is deciding what they get, luck is involved regardless of what the player believes.
  - Is there something real to win? (Prize) This means something of real value could be won.
  - Is this designed to keep me going? (Variable Reward Loop) “Variable” means you can’t predict when the next prize will come. A lottery ticket and a slot machine both involve gambling, but a slot machine’s lights, sounds, near-misses, and unpredictable payouts are built to keep you playing.

## THE LESSON, cont.

4. Explain: When the first three elements are all present, an activity meets the test most US state gambling laws use. Courts have generally not applied that test to loot boxes, usually because players cannot cash out their winnings for real money. That gap between how these systems are designed and how they are regulated is what makes them worth examining.
5. Help students apply these questions to three types of gambling-related experiences they may encounter in games (real-world examples in the green boxes):

Type 1. Some games contain casino-style minigames—slot machines, card tables, roulette wheels—that run on in-game currency. That currency can't be bought with real money, and it can't be cashed out.

Example: Stardew Valley is a popular farming game rated E10+ by the ESRB. Players grow crops, raise animals, and sell what they produce for in-game gold. Players can also unlock a hidden casino with slot machines and a blackjack-style card game called CalicoJack. To play, they trade gold for Qi coins, and they can spend any winnings at the casino's prize counter on in-game items. There is no way to buy Qi coins with real money, and no way to turn them back into money, or even back into gold.

Run the four-question test:

- Did I put something real at risk? No. Qi coins come from gold earned by playing, not from real money. Consideration is absent.
- Does luck decide the outcome? Yes. Chance is present.
- Is there something real to win? No. Prizes are in-game items that never leave the game. Prize is absent.
- Is this designed to keep me going? Yes. The slot machines use the same psychological mechanics as real ones. The variable reward loop is present.

Result: Not gambling, because no real money goes in or comes out. But it is built like gambling.

Why this matters: Researchers are studying whether practicing gambling for free makes real gambling feel normal, raising the risk for some young people, even when no money is involved. Ask: *What does a game teach you when it lets you practice gambling for free?*

Type 2. Some games sell random rewards for real money, or for currency bought with real money. Players don't know what they'll get, and some rewards are worth far more than others.

Example: EA Sports FC is a soccer game rated E for Everyone by the ESRB, with a label that reads "In-Game Purchases (Includes Random Items)." Players spend FC Points, which cost real money, on "packs" of player cards. They don't know which athletes are inside until the pack opens, and star players are rare.

## THE LESSON, cont.

Run the four-question test:

- Did I put something real at risk? Yes. FC Points are bought with real money. Consideration is present.
- Does luck decide the outcome? Yes. The players inside each pack are random. Chance is present.
- Is there something real to win? Yes. Players paid real money for what's inside, and some cards are worth far more than others. Prize is present.
- Is this designed to keep me going? Yes. Each pack opens with a dramatic reveal built to make players want the next one. The variable reward loop is present.

Result: All four elements are present, in a game rated E for Everyone.

Why this matters: EA Sports FC is one example, but this design is everywhere. Gacha games work the same way: players pay for a random character or item instead of choosing one. They're common in mobile games and in Roblox, a platform where a large share of players are under 13. The chance of getting a specific item is called the drop rate, and for the rarest items it is often below 1%. Ask: *If a game told you up front that your odds were 0.6%, would you still buy?*

Type 3. Some games use real money and deliberate psychological design, but nothing is random. Players know exactly what they're getting before they pay.

Example: Fortnite is free to play. It makes its money selling cosmetic items, such as outfits, dance moves, and other things that change how a character looks without changing how the game plays. Players buy them with V-Bucks, a currency bought with real money. The shop's items rotate on a schedule, so something a player wants may be gone tomorrow and not return for months.

Run the four-question test:

- Did I put something real at risk? Yes. Players spend real money through V-Bucks. Consideration is present.
- Does luck decide the outcome? No. Players see the item and the price before they buy. Chance is absent.
- Is there something real to win? No. Nothing is won; players get exactly what they paid for. Prize is absent.
- Is this designed to keep me going? Partly. Players don't know what the shop will offer next, so they keep checking back. Because the rewards are scheduled rather than random, this is a weaker version of the variable reward loop.

Result: Not gambling, because nothing is left to chance. But it is still designed to push spending.

Why this matters: The pressure to buy comes from design, not luck. The shop makes items feel scarce. In 2022, the FTC required Epic Games, Fortnite's maker, to pay \$245 million in refunds for design tricks that led players into purchases they didn't intend. Ask: *Where else have you felt pressure to buy something before it disappeared?*

## THE LESSON, cont.

6. Point out the pattern. Type 1 had luck but no real money. Type 3 had real money but no luck. Only Type 2 had both, and that combination plus a prize is what makes something gambling.

## ACTIVITY

### The Loot Box Game

You don't need to know anything about gambling to conduct this activity. You will be running a simple card game that is rigged, deliberately and in a specific way, to do four things to students:

- It takes their gems. The payouts look generous, but on average a student loses about a quarter of a gem every time they buy. Nearly half of the students who buy every round will end with zero gems, and a few will get lucky and finish ahead. That is not a flaw in the design—it is the point. Visible winners are what keep everyone else playing, and real systems work exactly this way.
- It creates fake urgency. In Round 2 you announce a "special event." The event really does increase the payout, but not nearly enough to make playing a good bet. Students will feel pressure to jump in anyway. That feeling is FOMO, and it is the lesson.
- It makes quitting feel like waste. In Round 3, you remind students how many gems they have already spent. Those gems are gone either way, but pointing at them makes walking away feel like a loss. This is the sunk cost fallacy.
- It makes losses feel like almost-wins. In Round 3, you point out cards that came close. Every miss is equally a miss, but hearing "so close" makes students want to try again. This is the near-miss effect.

*Teacher note: You are playing a role here. If it feels uncomfortable to pressure your students this way, that discomfort is worth discussing during the debrief. It is an honest reaction to watching these techniques used on purpose, and students often feel it too.*

### What You Will Need

- One standard deck of playing cards.
- A Student Packet for every student.
- A place to display winners' names.

## ACTIVITY, cont.

### Before You Start

- Display the rules (in Slides): A loot box costs 1 gem. Before every draw, choose *buy* or *skip* and write J, Q, or K. If the playing card drawn is your letter, you win 10 gems. Keep track of your score.
- Tell students: *Everyone starts with 10 gems. Anyone who finishes with 15 or more will have their name displayed on the board. Before each draw, you decide: buy a loot box, or skip.*

### How To Play

Be sure students have their score cards in front of them. Every draw works the same way:

1. You say: *Buy or skip?* Students fill out the first two columns on their score card.
2. You build the suspense. Hold up the top card face down. Pause. Say: *Ready?* Then flip it and announce it.
3. If it's a Jack, Queen, or King, students who wrote that letter add 10 gems. Have winners raise their hands so everyone sees who they are. They finish completing their score card.
4. Put the card back in the deck and shuffle.

#### Round 1—Normal play (4 draws)

Keep your tone completely flat. Do not congratulate winners or console losers.

#### Round 2—Limited-time event (2 draws)

Say: *Special event. For the next two draws only, if the card is your letter, you win 12 gems instead of 10. After the second draw, quietly go back to 10 without announcing it.*

*Teacher note: The event is real, but even at 12 gems, buying is still a losing bet on average. That is how limited-time offers work. Watch for students who had been skipping and suddenly join in. This is worth a mention during the debrief.*

#### Round 3—Pressure round (4 draws)

Play continues as normal, but you now add two things.

- Demonstrate “sunk cost”: Say: *Some of you have already spent five or six gems. If you stop now, you got nothing for them.*
- Demonstrate “near miss”: When a 10 comes up, say: *A 10. One away from a Jack.* When a face card comes up, say to those who picked a different letter: *So close.*

To end the game, say: *The game is closed. Write down your final gem count.*

## Debrief

- Take a show of hands: *Who finished with more than 10 gems? Fewer than 10? Zero?* Expect a split: many students who bought every round will be at or near zero, while a few finish well ahead. Explain that a student's letter came up about 1 time in 13, so each loot box paid back only about three-quarters of a gem on average. The more students bought, the more they tended to lose, and the few big winners are what made the game feel winnable.
- Discuss the psychological mechanisms at work: Have students turn to the last page of the Student Packet. Read each term aloud and ask students to raise a hand if they felt it while playing. Ask one volunteer to describe the moment they felt each:
  - ❑ Variable ratio reinforcement: Unpredictable rewards that make behavior harder to stop.
  - ❑ FOMO (fear of missing out): A limited-time offer that makes it feel like you have to act now.
  - ❑ Near-miss effect: Almost winning makes you want to try again more than losing outright does.
  - ❑ Sunk cost fallacy: Continuing to play because of what you've already spent, even when stopping is the better choice.
  - ❑ Dopamine: The brain chemical behind anticipating a reward. Unpredictable rewards trigger it more strongly than predictable ones.
- Explain that knowing a system is designed to manipulate you does not automatically protect you from it. The psychological mechanisms involved operate whether or not a person can identify them. This is not a sign of weakness. These systems are built using principles that influence behavior even when people understand exactly what is happening to them.
- Run the four-question test on this game. Ask: Which type was it? (Answer: Type 1. The gems were free, and nothing of real value could be won. In a real game, those gems would cost real money, which would make it Type 2.)
- To close, tell students that understanding persuasive design does not mean avoiding games or technology. It means recognizing when a system is trying to influence their decisions, so they can make informed choices about their own time, attention, and money.

## GOAL

Students use the four-question test to tell gambling apart from gambling-like design, and recognize the psychological techniques that make chance-based spending hard to resist.

FOR STUDENT:

# The Loot Box Game Score Sheet

You start with 10 gems.

- A loot box costs 1 gem.
- Before the teacher draws a card, write J, Q, or K.
- If the card drawn is your letter, you win 10 gems.
- Keep track of your own score on an honor system.

Name

Class

Date

| Draw                                              | Buy or skip? | My letter | Card drawn | Gems won | Gems I have now |
|---------------------------------------------------|--------------|-----------|------------|----------|-----------------|
| Start                                             |              |           |            |          | 10              |
| Round 1 – Normal play                             |              |           |            |          |                 |
| 1                                                 |              |           |            |          |                 |
| 2                                                 |              |           |            |          |                 |
| 3                                                 |              |           |            |          |                 |
| 4                                                 |              |           |            |          |                 |
| Round 2 – Limited-time event (a win pays 12 gems) |              |           |            |          |                 |
| 5                                                 |              |           |            |          |                 |
| 6                                                 |              |           |            |          |                 |
| Round 3 – Keep playing                            |              |           |            |          |                 |
| 7                                                 |              |           |            |          |                 |
| 8                                                 |              |           |            |          |                 |
| 9                                                 |              |           |            |          |                 |
| 10                                                |              |           |            |          |                 |
| MY FINAL GEM COUNT                                |              |           |            |          |                 |

## **TERMS TO KNOW**

### **GAMBLING**

Any activity in which something of real value is put at risk for the chance to win something of value, where the outcome is at least partly determined by luck.

### **LOOT BOX**

A virtual container in a video game that players pay to open in exchange for a random selection of items of different rarity and value. The contents are unknown until after payment.

### **GACHA**

A game mechanic, named after Japanese capsule-toy vending machines, where players spend currency for a random chance at characters, items, or upgrades of varying rarity.

### **IN-GAME CURRENCY**

Virtual money in a game, purchased with real money and spent inside that game. Converting real money into virtual currency makes spending feel less real, which is part of the design.

### **CONSIDERATION**

In gambling, the element of putting something of real value at risk, including real money or anything purchased with real money, like in-game currency.

### **CHANCE**

In gambling, the element in which the outcome is at least partly determined by luck rather than skill alone.

### **PRIZE**

In gambling, the element in which something of real value can be won.

### **VARIABLE REWARD LOOP**

A system designed to give rewards on an unpredictable schedule to keep people engaged. Not knowing when the next reward comes is what makes these systems hard to stop.

### **DROP RATE**

The percentage chance of receiving a specific item from a loot box or gacha pull. Rare items often have very low drop rates (sometimes less than 1%), and companies do not always disclose them.

# Psychological Mechanisms at Work:

## **VARIABLE RATIO REINFORCEMENT**

When rewards are unpredictable, behavior becomes more persistent and harder to stop. This is why slot machines are hard to walk away from, and why loot boxes and gacha games are designed the same way.

## **FOMO (FEAR OF MISSING OUT)**

The anxiety of potentially missing a limited-time opportunity. Game companies use FOMO deliberately through rotating shops and time-limited offers to pressure players into quick spending decisions.

## **NEAR-MISS EFFECT**

The experience of almost winning, which increases the desire to try again. Game and gambling designers use this deliberately, for example by showing a rare-quality animation that resolves into a common item.

## **SUNK COST FALLACY**

The tendency to keep investing time or money in something because of what has already been spent, even when stopping would be the more sensible choice.

## **DOPAMINE**

A brain chemical involved in motivation, learning, and anticipating rewards. Unpredictable rewards often produce stronger dopamine responses than predictable ones, helping explain why uncertain rewards can feel especially compelling.