

SCHOOL EDUCATION PROGRAM



VCAL – Numeracy unit: WHAT ARE THE ODDS?

Lesson 3: Pokies

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LOVE
THE
GAME

An initiative by



Lesson 3: Pokies

Lesson goal:

To determine the most likely outcome from playing the pokies a lot.

Through activities, simulations and discussions, you will learn that:

- random mathematical processes control pokies machines
- payouts are less than the amounts bet over time
- gaming venues can legally make payouts less than the amounts played
- the greater the number of bets, the greater the likelihood of losing all of the money you started with.

Through this lesson we are going to do the following:

Tune in – background information

Class simulations:

- Pokies spreadsheet – 10 games
- Pokies spreadsheet – 100 games
- Pokies spreadsheet – 1000 games

We will require the following worksheet:

Student worksheet 9 Pokies

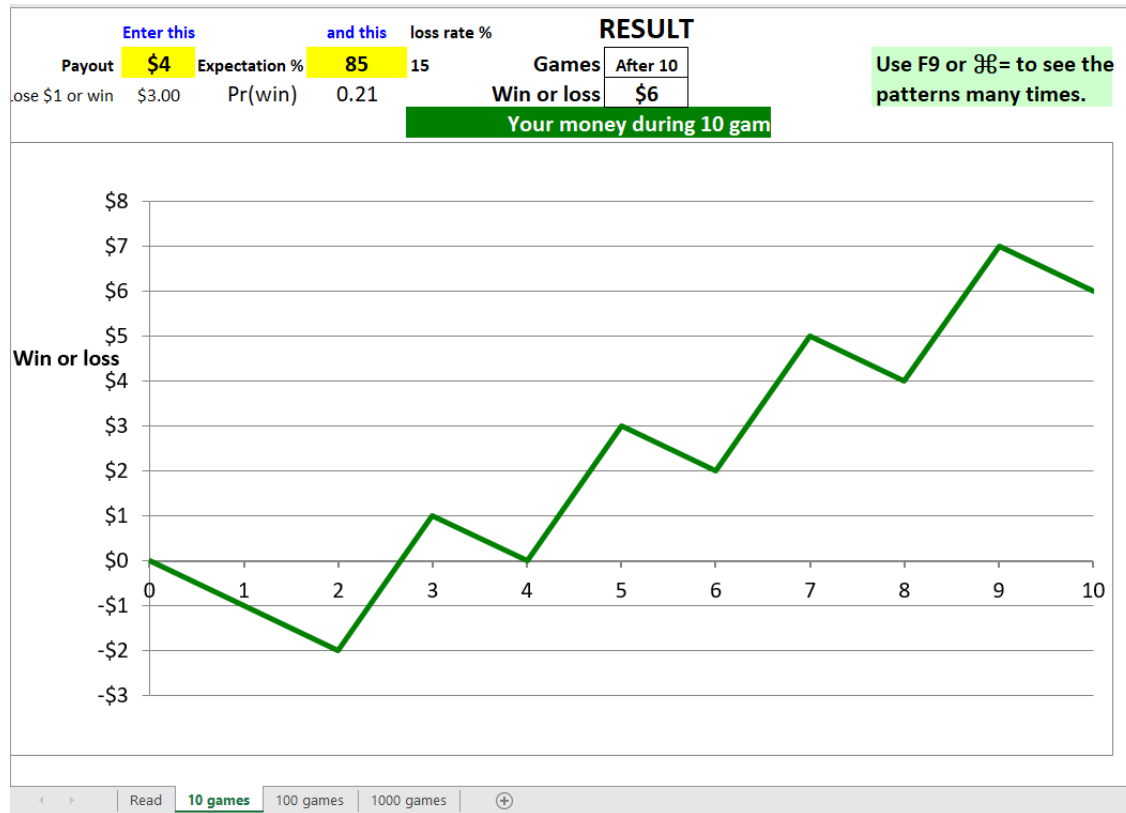
Class simulation:

- Discover just how much you can lose

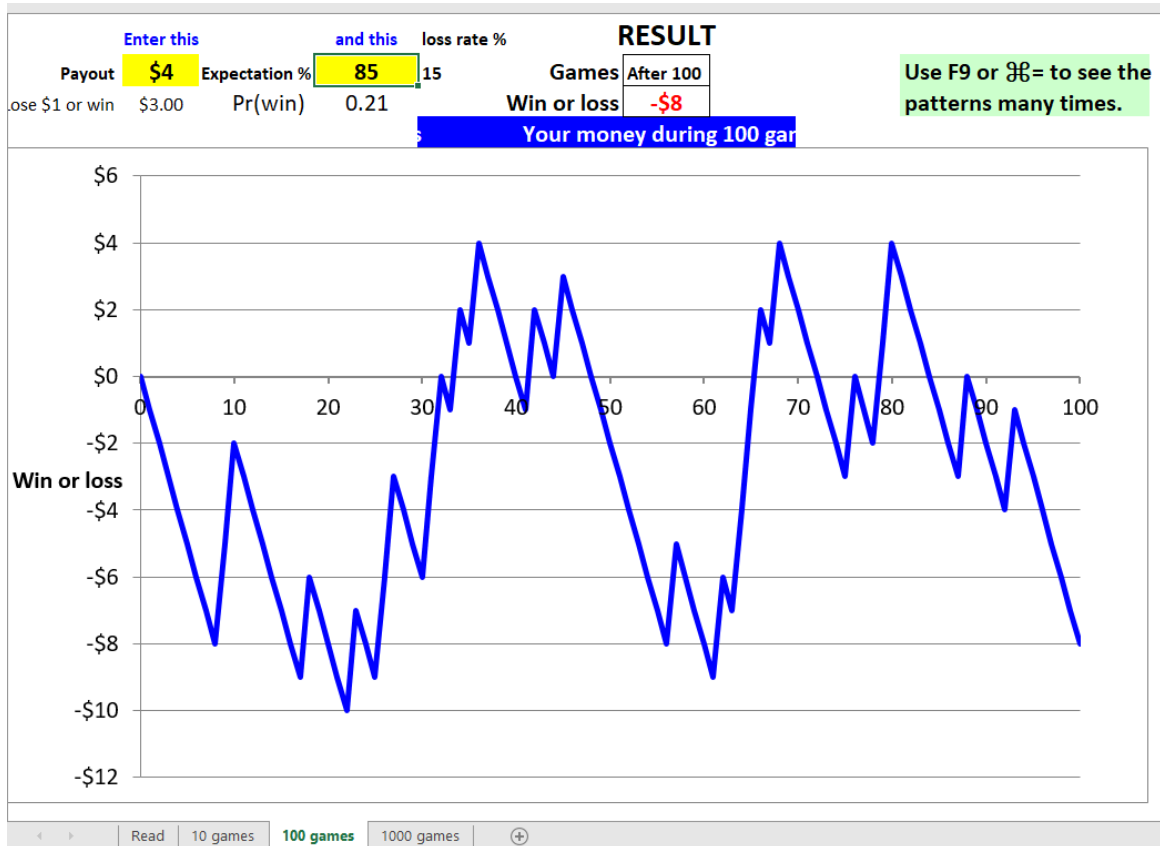
We will require the following worksheet:

- Student worksheet 12 Discover how much you can lose

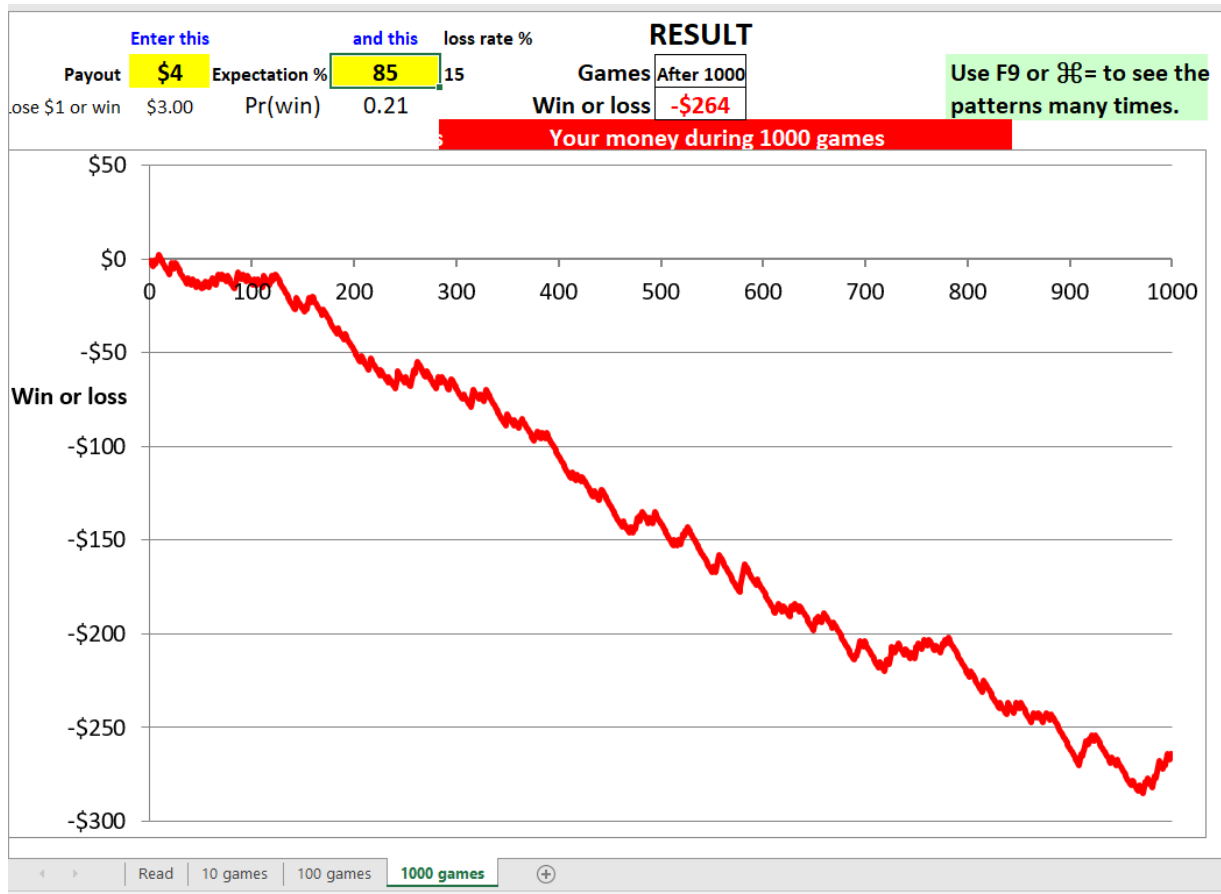
Screenshot of pokies spreadsheet – 10 games



Screenshot of pokies spreadsheet – 100 games



Screenshot of pokies spreadsheet – 1000 games



Worksheet

Student worksheet 9 Pokies



NAME: _____

10 GAMES

Enter the initials of 10 players from your class into the boxes below.

Predict

1. If each of these players plays 10 games on the pokies, betting \$1 per game, how many of them do you think will win money by the end of the 10 games? _____



Observe

2. Each player can now do a simulation using the 'Pokies' spreadsheet. Record their initials and how much they won or lost.

Initials																			
How much won or lost?																			

Explain

3. What percentage of the students ended up losing money after playing 10 games? _____
4. What was the average amount won or lost for a player playing 10 games at the pokies? _____

100 GAMES

Predict

5. All 10 players come back the next day to play again. Maybe some of them are feeling 'lucky' and others want to try to win their money back!

If each of these players plays 100 games, again betting \$1 per game, how many of them do you think will win money by the end of 100 games? _____

Observe

6. Each player can now do a simulation using the 'Pokies' spreadsheet. Record their initials and how much they won or lost.

Initials																			
How much won or lost?																			

Class simulation

DISCOVER JUST HOW MUCH
YOU CAN LOSE



If you are playing the pokies 3 times a month for about 30 minutes each time, and betting \$2 each button press, you can expect to lose \$2,160.00 per year to the house edge*

See how your playing style affects your expected losses.

*Based on an average of 10 button presses per minute

Worksheet

Student worksheet 12 Discover how much you can lose



NAME: _____

Pretend you play the pokies three times per week for 30 minutes each time and each bet is \$4. You make a spin about every six seconds.

The amount of each bet depends on the bet per line and the number of lines played per spin. These can be changed.

Prediction: How much money could you lose in a year? (Circle your choice.)

\$18 \$180 \$1,800 \$18,000 \$180,000

After you have made your prediction, the simulator will show the likely result.

1. What is the likely amount of losses in a year? _____
2. Was your prediction close? _____
3. What are the three factors that influence the amount you are likely to lose? _____

A relative plays the pokies two times per week for an hour each time and each bet is \$4. Again, each spin is about six seconds long.

Prediction: Compared to the amount you could lose, how much will your relative lose? (Circle your choice.)

A lot less A little less About the same A little more A lot more.

After you have made your prediction, the simulator will again show the likely result.

1. What is the likely amount? _____
2. How does the likely amount compare with your prediction? _____
3. Which parameters would you change to decrease your losses? _____

Another relative plays the pokies once a month for about 15 minutes with each bet being \$0.40. Again, each spin is about six seconds long.

Prediction: About how much will this relative lose in a year? (Circle your choice.)

\$7 \$70 \$700 \$7000 \$70,000

1. After you have made your prediction, the simulator will again show the likely result.
2. What is the likely amount? _____

Key messages

- The more you bet, the greater the likelihood of losing your money.
- If you try to win back your losses, you are very likely to fail and lose even more money.

Review your understanding:

1. Which of the key messages above do you think is the most important? Explain why.
2. Have you heard of the expression 'cut your losses'? What do you think this means? Do you agree that it is good advice?
3. Explain one other thing you have learnt in this lesson.

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