

CENTIPEDE HILL



RULE BOOK

GAME BY

AVA R, FRASER W & SABRINA G

CENTIPEDE HILL



Game Credits

Game by Ava R, Fraser W & Sabrina G.
Rule Book Layout and Design by Fraser W.
Game Art and Board by Ava R & Sabrina G.

Visit The Creator's Blog Posts On This Game

Ava R: [Game Of Exponent Laws Reflection](#)
Fraser W: [Centipede Hill - Exponent Laws Game](#)
Sabrina G: [Game Of Exponent Laws](#)

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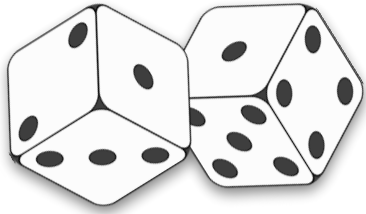
The Reproduction of Any Part of This Game Is
Prohibited Without The Authorization Of Its Creators.

Project Information

This Game Was Created As Part of A Performance
Learning Program: Scimatics 9 Project.

To Learn More About Performance Learning
Program, Please Visit plp.seycove.ca.

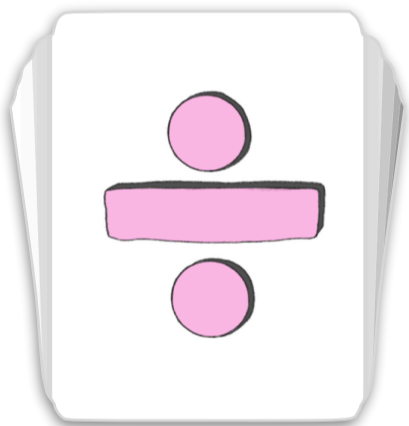
GAME COMPONENTS



Dice



Number Deck



Operation Deck



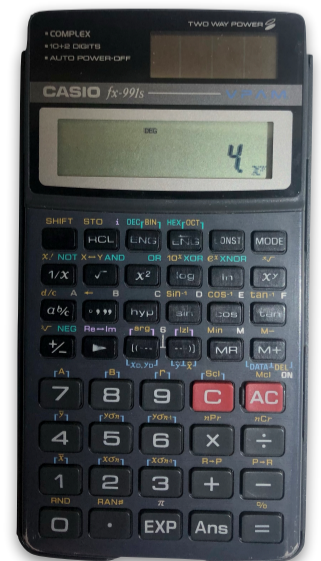
Game Board



Avatar Pieces



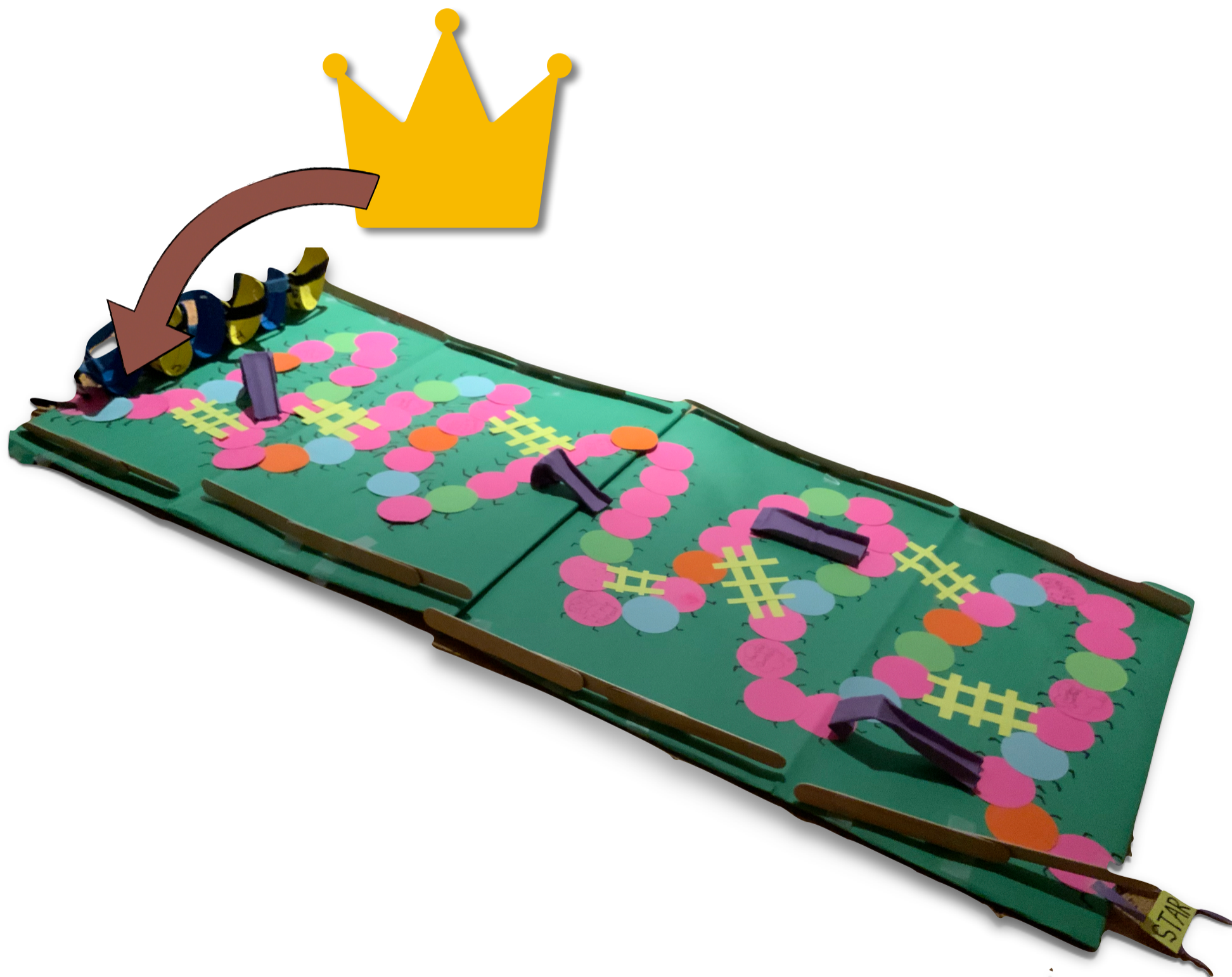
Ball



Scientific Calculator

OBJECTIVE

Be the first player to reach the winning tile on Centipede Hill!*



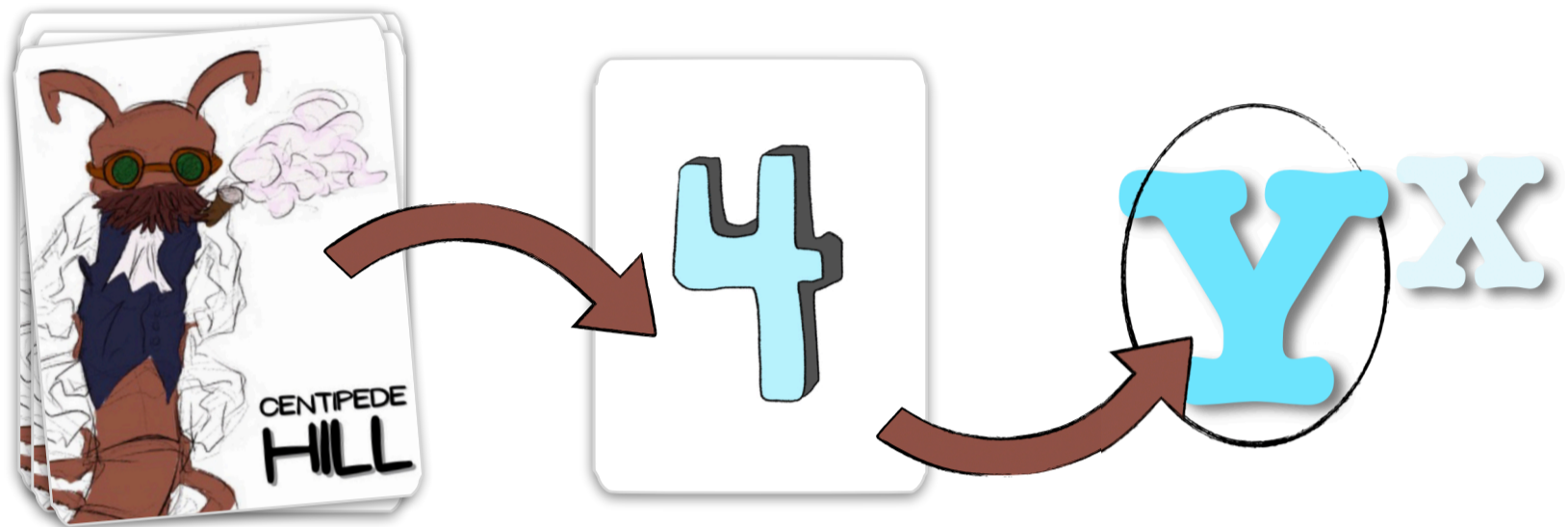
*A basic understanding of exponent laws is necessary to understand and play this game.

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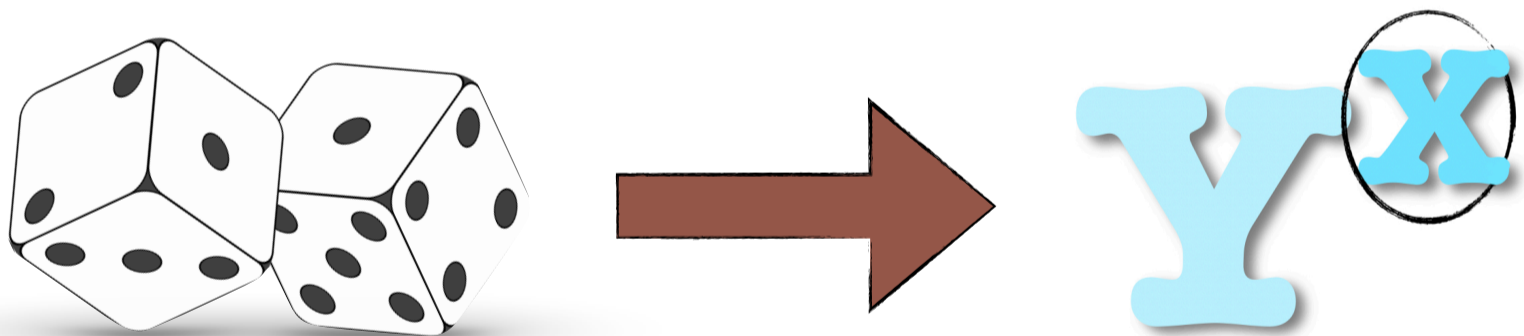
GAMEPLAY

The player must start by picking up 1 card from the Number deck. This card has a number on it.

The number is a **BASE**. (ie: 4^x , 7^x)



Then the player rolls the dice. The number that the player rolls is the **EXPONENT**. (ie: y^7 , y^5).



Then the player puts both the **BASE** and the **EXPONENT** together to create a **POWER**. (ie: 5^2 , 6^2)

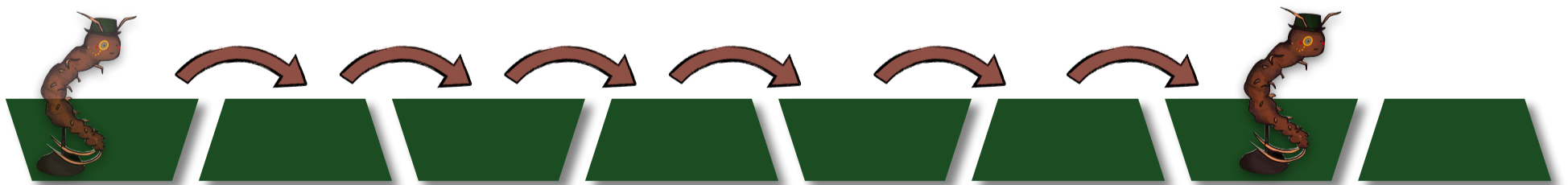
$$Y + X = YX$$

GAMEPLAY

The player must now evaluate the POWER as quickly as possible. Another player will use the calculator to check the answer.

$$4^3 = 4 \times 4 \times 4$$
$$= 16 \times 4$$
$$= 64$$

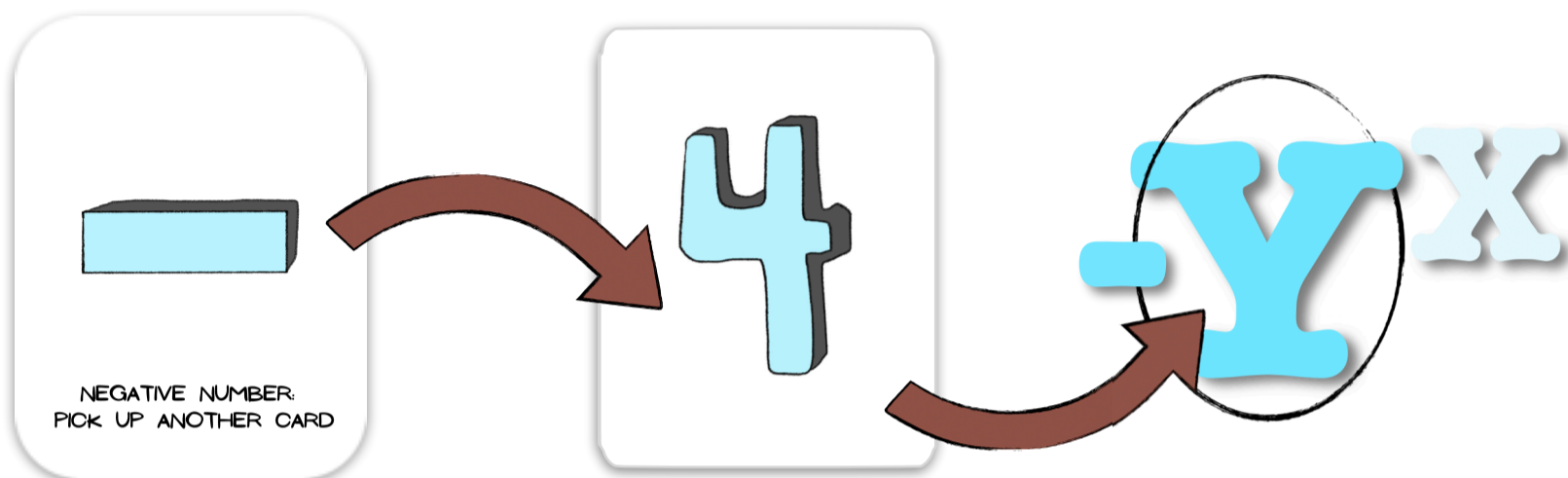
The first number from the answer is the number of spaces the player can move on the board. (ie: 64 turns into 6, so the player moves 6 spaces)



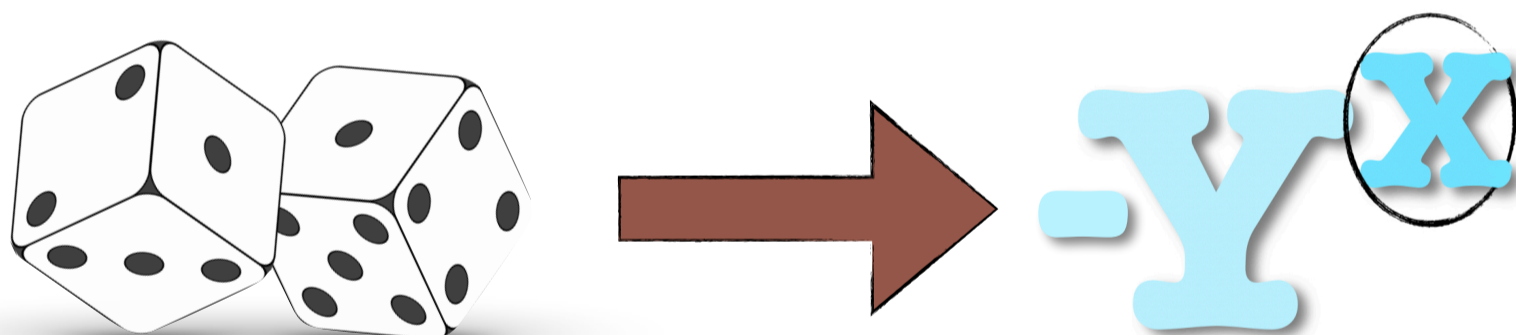
Repeat until the game is finished. The first player who makes it to the top of Centipede Hill wins.

GAMEPLAY

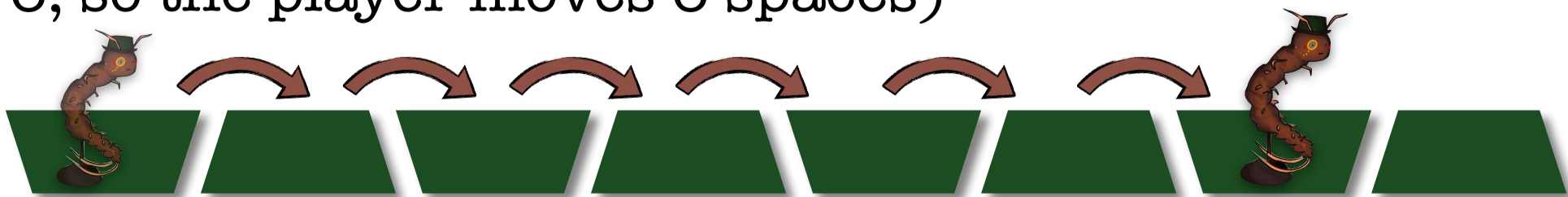
If you pick up a Negative Number card, you must first pick up another Number card. The twist: that number is now a **NEGATIVE BASE**. Then roll the dice to determine the **EXPONENTS**.



Then the player rolls the dice. The number that the player rolls is the **EXPONENT**. (ie: y^7, y^5).

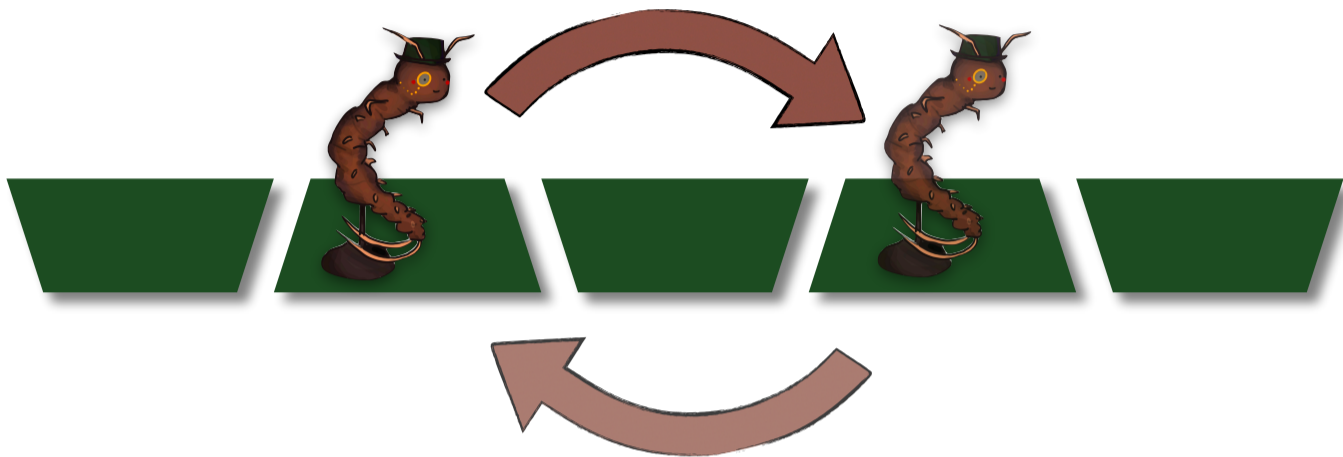
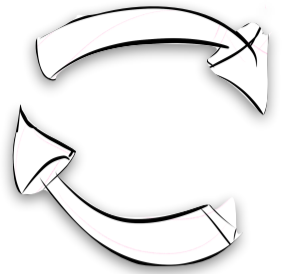


The player must now evaluate the **POWER** as quickly as possible. Another player will use the calculator to check the answer. The first number from the answer is the number of spaces the player can move on the board. (ie: 64 turns into 6, so the player moves 6 spaces)



SPECIAL SPOTS

Switch! If a player lands on this spot on the board they may switch spots with the nearest AVATAR ahead of you on the board.



Earthquake! If a player lands on this spot, then they must place a ball on the top of the board. This ball will move down the board and whichever's avatar the ball knocks over will be forced to go back to the beginning of the game.



SPECIAL SPOTS

Skip turn! If a player lands on this spot they must skip their next turn.



Triple Threat! If a player lands on this spot they get to repeat their turn three times in a row, BUT if they get any question wrong, they only move 1 space. However, if they get every question correct, they get to move the sum of the final answer from all their turns.



The sum of the first number from all three answers is the number of spaces the player moves on the board. (ie: 64 turns into 6, and 36 turns into 3 and 512 becomes 5. Add the three numbers: $6+3+5=14$, so move 14 spaces)

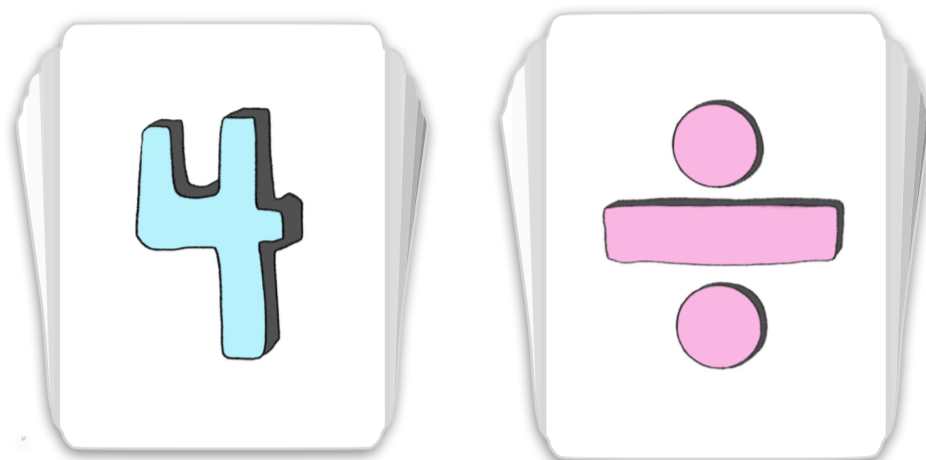


Hardest Questions! If a player lands on this spot on the board, they must complete the “Order of Operations” question on it during their next turn (the answer also allows the player to move further along the board.) If they get the question wrong, they only get to move one space.

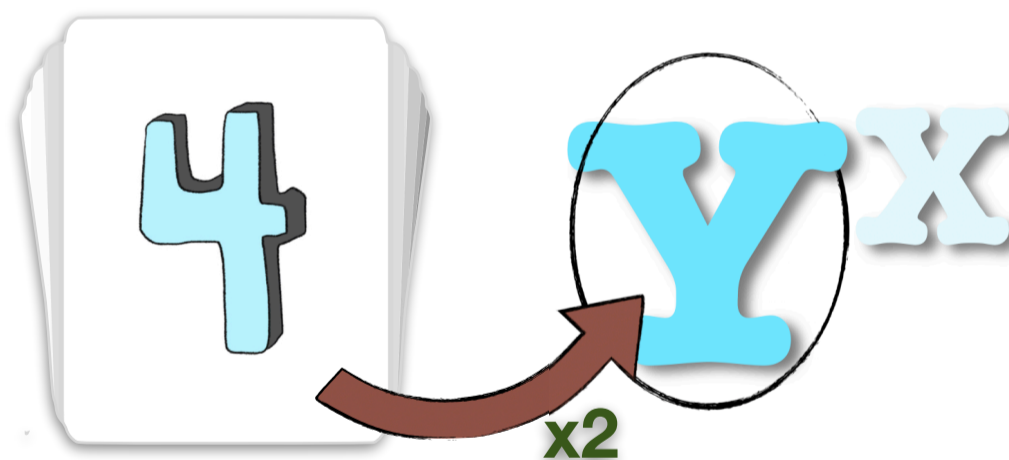


ADVANCED GAME

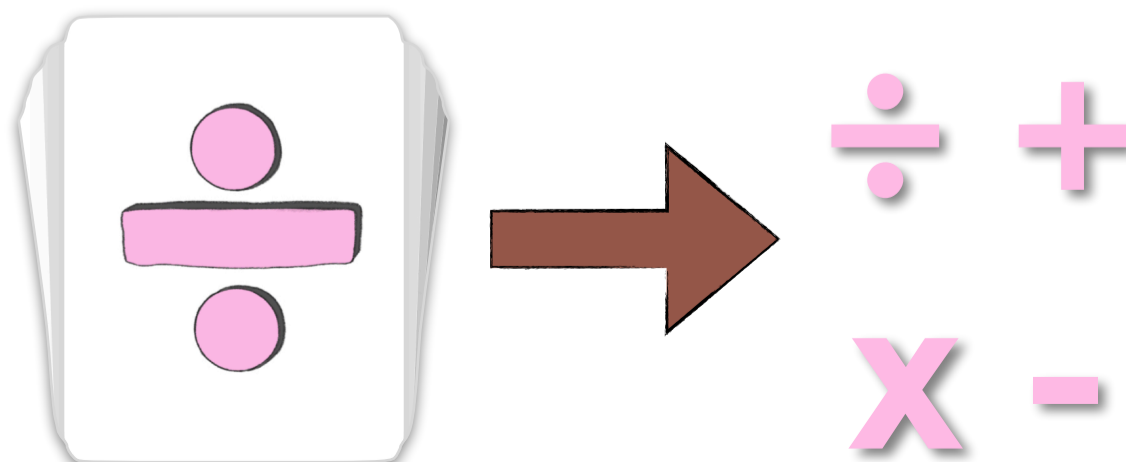
The player must pick up two cards from the Number deck, and one card from the Operation deck.



The numbers on the cards from the Number deck are both BASES.

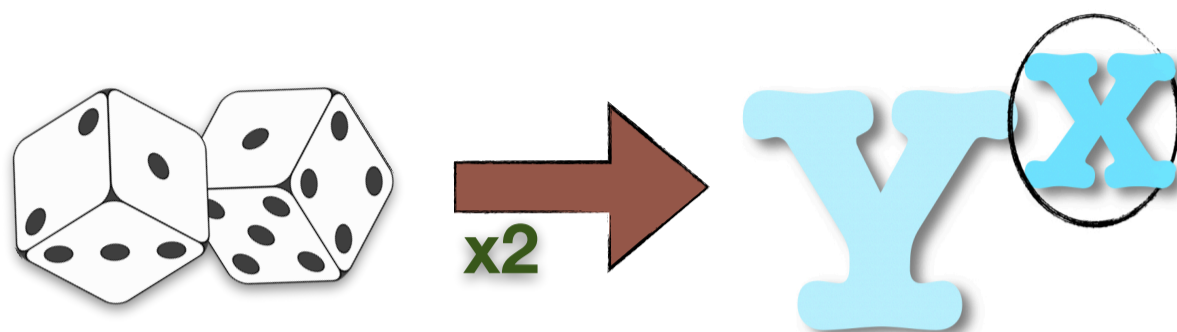


The card from the Operation deck is the OPERATION.



ADVANCED GAME

Then, the player rolls two dice. The numbers that the player rolls are EXPONENTS.



Then the player puts the two BASES and the two EXPONENTS together to create two POWERS (in the order the player picked them up in.)

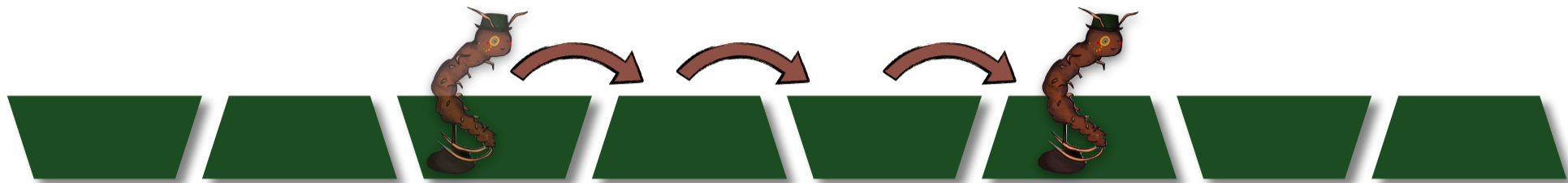
$$Y + X = YX_{x2}$$

The player now has to add the OPERATION and evaluate the power. Another player must double check the answer with the calculator to make sure it is correct.

$$YX \div + YX = Z$$
$$X -$$

ADVANCED GAME

The first number from the answer is the number of spaces the player can move on the board. (ie: 3,028 turns into 3)



Repeat until the game is finished. The player who makes it to the top of Centipede Hill wins.

