## Exponent Rodents!

4 of players maximum, 3 players minimum

## Set up:

O Start off with each player having 1 of each answer card (5 in total)
O Display the answer key side down. Players have 30s to collectively study the answer key before it is flipped and doesn't appear for the rest of the game
O Question deck is in the centre
O When a new round starts, all answer cards must be faced down until the host puts the question card down

## Directions:

- The host draws a question card from the deck, and selects a question card. The host has the answer to the question they choose ( $a, b, c$ etc..) and other players race to get the answer. On their answer cards, each player will have multiple options as to what the answer to the question is ( $a, b, c$, etc..). The first person to choose the right answer gets a point! Each player has 3 tries to get the answer right.


## Scoring

- When a player wins a round, they gather the question card used that round (as a point)
- Players must not exceed the amount of guesses given (3). If exceeded, and get the answer wrong then they must remove 2 points ( Q -cards) out of their total. If they get the answer right, they must give their earned point to the player if their choosing.


## Rules:

- Starting from the person with the longest hair, they are the first host. Moving forward, whoever wins the point for the round becomes the host.
- The host cannot share the answer with anyone, and must put the question card face down after studying it
- The host can only select one question per round from the middle of the deck
- If a player flips their answer cards before the host puts the question card down, they must wait 15 seconds before flipping
- When a player wins a point, they become the host for the next round


## Exponent laws being incorporated:

- Each exponent law we choose (min 4) will be incorporated through the question and answer cards. Each law will have a designated rodent and colour that differs depending on the law/ rule.


## PRoles:

- Host: The host is overseeing the game. They choose a question card from the middle of the deck and insure everyone's answer cards are faced down before displaying on the table. The host study's the answer and then allows the rest of the players to race to find the answer!
- Player: The player's job is to find the answer before other players. They use the whiteboard to find the answer first. If you win a the round, you collect the question card in the middle! When the round ends, all players must flip their answer cards front side down to insure no player gets a head start.

L Number of Pieces: 25 question cards, 5 of each colour
20 answer cards, 4 of each colour

## Answer Card Key

| Exponent law: | Rodent: | Colour of the card: |
| :--- | :--- | :--- |
| $x^{n} \times x^{m}=x^{n}+^{m}$ | Beaver | Lime green |
| $x^{n} \div x^{m}=x^{n}-{ }^{m}$ | Rabbit | Bright Yellow |
| $\left(x^{n}\right)^{m}=x^{n} \times m$ | Squirrel | Royal blue |
| $(x \times y)^{n}=x^{n} \times y^{n}$ | Prairie dog | Deep orange |
| $(x \div y)^{n}=x^{n} \div y^{n}$ | Hamster | Purple |

Answer key: : :anmes

| Beaver |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| A. | $5^{2} \times 4^{2}$ | 400 | $6^{3} \div 2^{2}$ | 54 |
| B. | $5^{2} \times 3^{3}$ | 675 | $4^{3} \div 4^{2}$ | 4 |
| C. | $6^{0} \times 4^{2}$ | 16 | $10^{4} \div 5^{2}$ | 400 |
| D. | $7^{2} \times 2^{2}$ | 196 | $8^{2} \div 2^{2}$ | 16 |
| E. | $2^{3} \times 4^{2}$ | 128 | $5^{3} \div 7^{0}$ | 125 |
| F. | $6^{2} \times 3^{3}$ | 972 | $9^{2} \div 2^{\circ}$ | 81 |
|  | Squarrel |  | Prairie Dog |  |
| A. | (42) ${ }^{2}$ | 256 | $(5 \times 2)^{2}$ | 100 |
| B. | $\left(5^{1}\right)^{3}$ | 125 | $(4 \times 0)^{3}$ | 0 |
| C. | (23) ${ }^{3}$ | 64 | $(5 \times 3)^{2}$ | 225 |
| D. | $\left(3^{3}\right)^{2}$ | 81 | $(8 \times 4)^{0}$ | 1 |
| E. | $\left(4^{0}\right)^{7}$ | 1 | $(11 \times 1)^{2}$ | 121 |
| F | $\left(7^{2}\right)^{1}$ | 49 | $(9 \times 2)^{2}$ | 324 |


|  |  | Hamster |  |
| :--- | :--- | :--- | :---: |
|  | $(5 \div 5)^{8}$ | 1 |  |
| B. | $(8 \div 2)^{2}$ | 16 |  |
| C. | $(10 \div 5)^{2}$ | 8 |  |
| D. | $(25 \div 5)^{3}$ | 125 |  |
| E. | $(9 \div 3)^{4}$ | 81 |  |
| F. | $(24 \div 6)^{4}$ | 256 |  |

Answer key

## Example: (Host)

(1) Draw question card:

| Q-card |
| :--- |
| $x(y x) x y$ |
| Answer: |
| B. |
| Time: $45:$ |

(2) Study the answer:

(3) FI:P Q-card and display on the table:

$$
x^{y} \times x_{u s}^{y}
$$

## Example

## (Player)

(1) look at your answer
cards

(2) When you see the Question,
select the appropriate answer card
and Select Possible answers to the
Equation on the $Q$-card:

(3) Find the answer before other Players


Front


A:400 D:196
B:675 E:128
C:16 F:972
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Back
ANSWER CARD

$x^{n} \cdot x^{m}=x^{n+m}$

Question Card


Host side Answer:


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