

ExPoNEnts!!!11!!!1!!

Players:

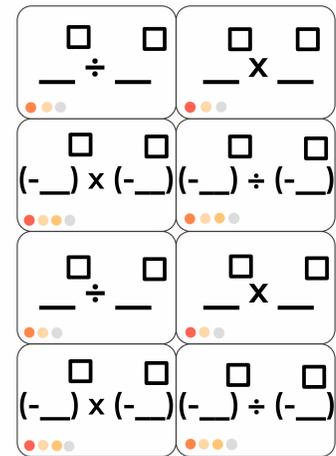
(2-5) at a time.

Contents:

- Two (colour) base and exponent dice
- Two (colour) base and exponent dice
- Equation cards
- Point sheet
- Writing utensils
- Scrap paper

Game set up:

Every player gets a point sheet, pencil, scrap paper, and a calculator. Shuffle the equation cards and place both the dice and the cards in the middle. Everyone rolls one dice. The player with the highest number goes first, each player take turns clock-wise from there on.



Equation Cards

Your turn:

Start your turn by rolling four dice. Two dice are the exponents and two are the base. Match the dice by colour, the D10 is the exponent and the D100 is the base (ie. if you rolled a 80 [D100] and a 6 [D10], this will be equal to 8^6)

After you've rolled, Pick up one of the **equation cards**. These cards provide a template for you to use your rolled numbers as an equation. The only event in which you do not have to pick up an equation card is if you roll 4 dice of the same number. In this case, you can apply these numbers to the "standard form" category on the point sheet.

If you wish to re-roll your dice after picking up an equation card, you may. However, you can ONLY re-roll a singular D10 and D100.

Put your base (D100) with its exponent (D10) anywhere on the equation. The colours on the equation card correlates to which categories the card is applicable to on the points sheet.

At this point, your equation should look something like this: $8^3 \cdot 8^2$. This particular equation applies to the product rule, and therefore can be simplified to 8^5 .

Simplify your equation in a similar way, and decide where it applies on the point sheet. Then, write down the simplified exponential form where applicable. In the event that your equation is not applicable to any category on the point sheet, you are to cross out a category.

The goal:

The goal of the game is for all players to complete their point sheet, though players may decide to end the game sooner by limiting the number of categories they're aiming for. At the end of the game, add up your base numbers, then add up your exponent numbers. DO NOT EVALUATE THEM. The player with the most amount of total points wins.

Point Sheet Guide:

Name:	Base Number POINTS	Exponent Number POINTS	Base Number POINTS	Exponent Number POINTS
Quotient rule. "X ^v ÷ Z ^y "				
Quotient rule. Same bases or exponents. "X ^z ÷ X ^y " "Y ^x ÷ Z ^x "				
Product rule. "X ^v x Z ^y "				
Product rule. Same bases or exponents. "X ^z x X ^y " "Y ^x x Z ^x "				
Quotient rule subtracted. "(-X ^v) ÷ (-Z ^y)"				
Quotient rule subtracted. Same bases or exponents. "(- ^z) ÷ (- ^y)" "(-Y ^x) ÷ (-Z ^x)"				
Product rule Subtracted. "(-X ^v) x (-Z ^y)"				
Product rule Subtracted. Same bases or exponents. "(-X ^z x X ^y)" "(-Y ^x x Z ^x)"				

Name:	Base Number POINTS	Exponent Number POINTS	Base Number POINTS	Exponent Number POINTS
Equations with the power of 0. " X to the power of 0."				
Standard form: roll 4 dice of the same number. "x*x*x*x = x^4"				
SUB CATEGORY: 10 POINTS EACH if you reach an exponential form of:				
6^6				
5^2				
3^4				
4^5				
5^2				
3^4				
TOTALS:				

POINT SHEET CATEGORIES:	FORMULA / EXPONENT LAW:
Simplify the equation with the same base numbers.	a^{m+n}
Divide numbers with the same base.	$a^m/a^n = a^{m-n}$
Simplify your equation to its exponential form. If it's in the negatives, this will be subtracted from your final score.	$(a^m)^n = a^{m*n}$
Equations with the power of 0 " X to the power of 0."	Everything to the power of 0 = 1
Roll 4 dice of the same number. Write the base numbers down with an exponent of 4.	$a*a*a*a = a^4$ Standard Form
SUB CATEGORY: 10 POINTS EACH if you reach an exponential form of:	Simplifying equations.
5^6	
3^2	

POINT SHEET CATEGORIES:	FORMULA / EXPONENT LAW:
4^3	
5^5	
6^3	
2^4	