Reviewing Exponents

Let's review exponents.

1.1 Reviewing Exponents

Complete the table.

expanded form	exponential form
$2 \cdot 2 \cdot 2$	2^3
$3 \cdot 3 \cdot 3 \cdot 3$	
	5^2
$x \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x$	
	y^3
	$(x \cdot y)^2$

1.2 Saving Money

Clare has a summer job. She wants to save money to spend on the family vacation at the end of summer. She is going to save $5 per week for each of the 10 weeks she is working.

Tyler also has a summer job, and he, too, would like to save money to spend on a family vacation. His aunt gives him $1 to start saving, and Tyler decides to double the amount he saves each week.

Complete the table showing how much money each of them will have saved at the end of each week for the 10 weeks.

week	0	1	2	3	4	5	6	7	8	9	10	x
Clare	0	5	10	15								
Tyler	1	2	4	8								

1.3 Identifying Equivalent Expressions

Choose an expression from List A, and match it with an equivalent expression from List B and from List C. Be prepared to explain your reasoning.

- For each match that you find, explain to your partner how you know it's a match.
- For each match that your partner finds, listen carefully to their explanation. If you disagree, discuss your thinking and work to reach an agreement.
- Switch roles so that your partner chooses a different expression from List A and matches it with an equivalent expression from List B and from List C.

List A	List B	List C
$8 \cdot 8 \cdot 8$	10^3	18
$9 \cdot 27 \cdot 3$	$6 \cdot 3$	$\frac{1}{32}$
$10 \cdot 100$	$\left(\frac{1}{2}\right)^5$	512
$\frac{1}{4} \cdot \frac{1}{4} \cdot \frac{1}{2}$	$3^2 \cdot 3^4$	729
$3+3+3+3+3+3$	$2^3 \cdot 4^3$	1,000