

Math

Lesson Objectives & Teacher Notes

Lesson Title	Order of Operations with Exponents	Code	7N019	Grade	7
Objective	Evaluate expressions with exponents using order of operations.				
Page 1	Title page.				
Page 2	Review order of operations. Before solving the problem, ask as student volunteer to order the cards.				
Page 3	Raise the Parentheses card and then position the red exponent card to show the order of operations rule for order expressions which include exponents. Ask students to then solve the problem. Click on the green boxes at the bottom of the page to reveal the answer and the simplified answer.				
Page 4	Introduce the PEDMAS mnemonic and then review the rules for order of operations by lowering the Screen Shade as you work through each step.				
Page 5	Use the Pen Tool to complete and simplify the expressions. This activity can be assigned as a task and then solved at the SMART Board.				
Page 6	Solution to page 5.				
Page 7	Practice questions. This activity can be assigned as a task and then solved at the SMART Board. Click on the question number to animate the answers.				
Page 8	A matching pair activity. Give an example of multiplying negative integers with and without parentheses. For example, $(-5)^2 = (-5)(-5) = 25$, $-5^2 = -(5 \cdot 5) = -25$				
Page 9	This page shows the matching expressions. Ask students to then simplify.				
Page 10	A contextual question. Ask students to write an expression for the items purchased. Simplify to find the total cost of the purchases. Click on the voucher image to reveal the answers.				