



TOOL // Grade 5 Expressions – Assessment As/Of Learning

What is it used for?

The tool provides students with an opportunity to practice for a summative assessment and receive peer and teacher feedback prior to writing an assessment. The goal is to allow students to identify what they know, what they need help with and to obtain support in deepening their understanding before a summative assessment.

How do you use it?

Each student is given the assessment review. They complete it in half of the class. They then meet with a partner and share their responses and answers. They discuss and improve where needed. They may ask the teacher for feedback if both are having trouble with a particular skill and have checked their text or notebook. Students highlight what they need to review prior to the summative assessment. They write the summative assessment in the next couple of days and the teacher evaluates using the rubric. When the assessment is returned, the students are asked to reflect on how well they did in response to the pre-assessment feedback.

How do you adapt it to other subjects and topics?

This tool could be adjusted to be used for any math assessment.

Grade 5 Assessment Review - Expressions

Write the definition of each word and show with an example:

Expression _____

Product _____

Constant _____

Variable _____

Operation _____

Quotient _____

Evaluate each expression

$2b + 11$ $b = 20$

$5x - 15$ $x = 12$

$14 - x + 8$ $x = 6$

$\frac{24}{y} + b$ $y = 8$ $b = 3$

Write the expression for:

15 increased by y _____

The quotient of 6 and x _____

The product of 9 and y _____

The difference between 12 and x _____

Write words to describe the equation

$11x - 2$ _____

$10 + 7s$ _____

If you order Tyco Beany Babies on line it costs \$3.00 per Stuffy plus \$10.00 shipping. Write an algebraic expression to show what it costs to order Beanie Babies on line? Use your algebraic expression to show what it would cost if you ordered 6 Beanie Babies.

Don can collect 5 shells per day while he is on vacation plus 6 extras. Write an algebraic expression to show how many shells he could collect? Use your algebraic expression to show how many he collected if he was on vacation for 2 weeks.

Grade 5 Expression Assessment

Knowledge and Understanding

Match the vocabulary to the correct definition. Write the answer in the blank on the left side of that paper.

| | | | | | | | | | |
|----|----|----|----------------------------|----|----|---|--|--|--|
| | | | | | | | | | |
| A. | 1. | 1. | Algebraic Expression _____ | A. | A. | A number that stands by itself and doesn't change | | | |
| | 2. | 2. | Constant _____ | B. | B. | The answer to a multiplication question | | | |
| | 3. | 3. | Variable _____ | C. | C. | A math process: adding, subtracting multiplying, dividing | | | |
| | 4. | 4. | Operation _____ | D. | D. | A number sentence without an equal sign, has at least one letter and one number and one operation | | | |
| | 5. | 5. | Product _____ | E. | E. | A letter that represents a number that changes | | | |

Evaluate the expressions.

$4x - 12$ $x = 4$

$a + 3b$ $a = 3$ $b = 2$

$6y$ $y = 5$

$\frac{x-7}{6}$ where x is 42

Communication

Write the expression for:

10 increased by y _____

The quotient of 4 and x _____

The product of 6 and y _____

The difference between 9 and x _____

Write words to describe the equation

$5x - 4$ _____

$10 + 5s$ _____

Problem Solving Show ALL Your Work

| Categories | Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|--|--|
| Knowledge and Understanding 1. \$ facts, terms, procedural skills | demonstrates limited knowledge of facts, terms, procedural skills by applying them with several major errors (1 terms, 1 evaluating) | demonstrates some knowledge of facts, terms, procedural skills by applying them with several minor errors or omissions (2/3 terms, 2 evaluating) | demonstrates considerable knowledge of facts, terms, procedural skills, by applying them with few minor errors or omissions (4 terms, 3 evaluating) | demonstrates a thorough knowledge of facts, terms, procedural skills, by applying them with rarely any errors or omissions (5 terms, 4 evaluating) |
| Thinking understands the problem makes a plan(chooses a strategy) carries out the plan looks back - justifying, proving, reflecting | demonstrates limited effectiveness in: understanding what the problem is asking choosing a strategy and rarely carrying it through to an accurate solution | demonstrates some effectiveness in: understanding what the problem is asking choosing an appropriate strategy and sometimes carrying it through to an accurate solution | demonstrates considerable effectiveness in: understanding what the problem is asking choosing an appropriate strategy and usually carrying it through to an accurate solution (may have minor computational error) | is highly effective in: understanding what the problem is asking choosing an effective strategy and consistently carrying it through to an accurate solution |
| Communication expresses mathematical ideas orally , visually and in writing using numbers symbols, pictures, graphs, diagrams and words explains, justifies, reflects | communicates mathematical thinking with limited effectiveness with little evidence of organization, clarity, uses conventions, vocabulary and terminology with limited effectiveness to convey mathematical information 1 | communicates mathematical thinking with some effectiveness with some degree of organization, clarity, uses conventions, vocabulary and terminology with some effectiveness to convey basic mathematical information 2 | communicates mathematical thinking with considerable effectiveness with an appropriate degree of organization, clarity uses conventions, vocabulary and terminology with considerable effectiveness to convey mathematical information 3/4 | communicates mathematical thinking effectively with a high degree of organization, clarity uses conventions, vocabulary and terminology effectively to convey mathematical information 5/6 |

The NDSS cafeteria charges the school \$6.00 per students for the lunch meal. Write an algebraic expression to show the cost of lunch for students in the school. What would the school pay for 200 students?

Amazon charges \$4.00 per book plus a \$15.00 to ship the books to your house. Write an algebraic expression to show the cost of order any number of books. What would it cost you if you bought 8 books?