

Key Vocabulary Level 2 Standard

Picture first, then the word, then a plain-language meaning. Say each word out loud.

x

stands for a number

In $3x + 5$, x can be any number — if $x = 2$, the expression equals 11; if $x = 10$, it equals 35

Variable

Write the definition:

$3x + 5$

no equal sign

$2n + 7$ is an expression: the $2n$ means '2 times some number' and the $+ 7$ means 'then add 7'

Expression

Write the definition:

$3x + 5$

no equal sign

*Evaluate $2n + 7$ when $n = 4$: replace n with $4 \rightarrow$
 $2(4) + 7 = 8 + 7 = 15$*

Evaluate

Write the definition:

x \rightarrow **5**

put a number in for x

Substitute 3 for x in $5x$: replace x with 3 $\rightarrow 5(3) = 15$

Substitute

Write the definition:

$$4x$$

coefficient = 4

*In $7m$, the coefficient 7 tells you to multiply m by 7
— if $m = 3$, then $7m = 21$*

Coefficient

Write the definition:

$$3x + 2x = 5x$$

same variable → combine

*$4x$ and $2x$ are like terms (both x^1); $4x$ and $4y$ are
NOT (different variables)*

Like terms

Write the definition:

Guided Notes Level 2 Standard



WHAT WE'RE LEARNING TODAY

I can evaluate algebraic expressions by substituting values for the variables.



Fill in each blank as we go. Use the Word Bank to help you.



WORD BANK – FILL EACH BLANK WITH THE BEST WORD

Variable

Expression

Evaluate

Substitute

Coefficient

Like terms



Tap any word to see what it means and a picture.

1

A letter that stands for an unknown number, like x , is a .

2

A group of numbers, variables, and operations with no equal sign is an .

3

To find the value of an expression for given values is to it.

4

To replace a variable with a number is to .

5

A number multiplied by a variable, like the 4 in $4y$, is a .


6

Terms with the same variable part, like $2x$ and $6x$, are .



Watch & Try – Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

 **I do – watch**


Follow each step as your teacher solves it.

Problem: Evaluate $3x + 7$ when $x = 4$.

- A. 19
- B. 34
- C. 12
- D. 14

Step 1 $3(4) + 7 = 12 + 7 = 19$.

 **Answer:** A. 19

 **We do – together**

Solve this one with your class using the same steps.

Problem: Evaluate $20 - 2n$ when $n = 6$.

- A. 8
- B. 14
- C. 32
- D. 12

Step 1 _____

Step 2 _____

Answer: _____

 **You do — your turn**

Now try one on your own. Show every step.

Problem: Which expression means '5 less than twice a number n '?

A. $2n - 5$

B. $5 - 2n$

C. $2(n - 5)$

D. $2 - 5n$

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. Track 2 — The volume mix is $2(n + 3)$, where n is the number of monitors. Evaluate $2(n + 3)$ when $n = 5$.

- A. 16
- B. 13
- C. 20
- D. 26

Show your work:

2. Track 3 — The speaker power is x^2 , where x is the gain setting. Evaluate x^2 when $x = 6$.

- A. 36
- B. 12
- C. 18
- D. 30

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A gym membership costs \$25 per month plus a \$40 signup fee. Write an expression using m for months, then evaluate it for 6 months and 12 months.

Explain what each part of the expression represents.

Sentence starter: The expression is _____. For 6 months: _____ = _____. For 12 months: _____ = _____. The _____ represents the _____ and the _____ represents the _____.

Show your work:

Reflect — Exit Ticket

Evaluate $5(n - 3) + 2$ when $n = 7$.

- A. 22
- B. 32
- C. 17
- D. 36

Your answer:
