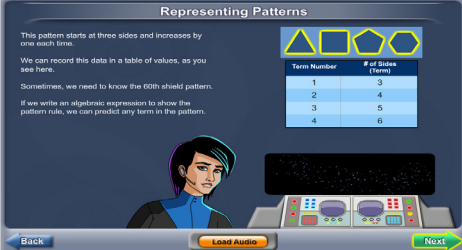

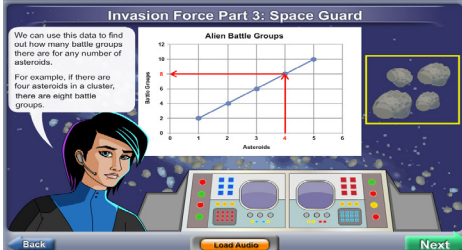
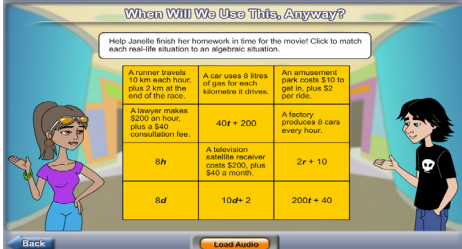


# Grade 8 Patterning and Algebra

## Ontario Educational Resources Bank (OERB) Activities

Patterns and Relationships	
Activity	Description
<p style="text-align: center;"><b>Invasion Force Part 1: Home Guard</b></p>  <p style="text-align: center;"><b>Resource ID: ELO1412480</b></p>	<p>Build understanding of patterns and relationships by examining and extending linear growing patterns, and choosing the best expression for the general term.</p>
<p style="text-align: center;"><b>Invasion Force Part 2: Mars Guard</b></p>  <p style="text-align: center;"><b>Resource ID: ELO1412490</b></p>	<p>Build understanding of linear relations by identifying patterns on graphs as linear or non-linear, completing tables of values for linear equations, and plotting the ordered pairs that result on a Cartesian plane.</p>
<p style="text-align: center;"><b>Invasion Force Part 3: Space Guard</b></p>  <p style="text-align: center;"><b>Resource ID: ELO1412500</b></p>	<p>Build understanding of how to determine the value of an unknown term in a linear relation by extending a graphical pattern and by substituting into an algebraic equation, then comparing the two strategies.</p>
<p style="text-align: center;"><b>When Will We Use This Anyways?</b></p>  <p style="text-align: center;"><b>Resource ID: ELO1412510</b></p>	<p>Build understanding of how algebraic thinking is used in real-world problem solving by exploring situations that use it, and by matching algebraic expressions to real-life situations.</p>

**Grade 8 Patterning and Algebra**  
**Ontario Educational Resources Bank (OERB) Activities**

**Variables, Expressions and Equations**

**Activity**

**Description**

**Evaluating Algebraic Expressions Using Substitution**

Evaluating Algebraic Expressions Using Substitution

Any letters can be used for variables.

Example  $r = 3, v = 9, k = 12$

$k - v + r = ?$

$12 - 9 + 3 = 6$

You try some now. Click NEXT to continue.

back next

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**Resource ID: ELO1087680**

Practise evaluating algebraic expressions by substituting variable values into the expression and following proper order of operations.

**Rex and Tex: Balancing Act**

Isolating Variables and Units

$2x - 3 = -1$

Now, create zero pairs. Once you are finished, click on Rex.

Toolbox

+1 -1 +x -x

Back Load Audio

**Resource ID: ELO1413890**

Practise solving equations by viewing demonstrations and balancing equations using virtual algebra tiles.