

# ***Blue Hills Summer Math Enrichment***

Summer's finally here! Click on the links below to access some math activity options to help you prepare for next year. We hope you have a wonderful summer!

[Entering Grade 9](#) Slide 2

[Entering Grade 10](#) Slide 3

[Entering Grade 11](#) Slide 4



# Entering Grade 9 Practice

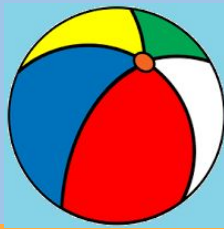


**Welcome Blue Hills Class of 2024!** The Blue Hills math teachers are looking forward to getting to know you next year. To help you prepare for next year's math course, spend some time practicing by following the links below.

**Click the links below to access the math practice options.**

1. [Grade 8 Practice MCAS](#) Brush up on previously learned math standards that will help you succeed next year. When you finish, submit the responses and check your [answers](#).
2. [Algebra Smash GAME](#) Practice number sense and algebra skills by solving the equations before the Hulk loses control! [DIRECTIONS](#) on slide 5
3. [Equations Math Balloons](#) Determine whether given values are solutions to equations in order to level up and beat this game. [DIRECTIONS](#) on slide 7

# Entering Grade 10 Practice



## Students Entering Geometry

Keep your skills fresh by practicing the MCAS questions below to brush up previously learned math standards. When you finish, submit your responses and check your answers.

### Grade 8 MCAS

and/or

### Grade 10 MCAS

[Section 1: No Calculator](#)

[Section 1: No Calculator](#)

[Section 2 - Calculator](#)

[Section 2 - Calculator](#)

[Answers](#)

[Answers](#)

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**Choose at least one** game below to brush up on your algebra skills before school starts next year!

[Algebra Smash GAME](#)

or

[Math Balloons GAME](#)

Solve the equation puzzles before the Hulk smashes EVERYTHING!

[DIRECTIONS](#) on slide 5

Once you start, it's hard to stop playing this equation solving game!

[DIRECTIONS](#) on slide 7

## Students Entering Honors Geometry

### Grade 10 MCAS Practice Questions

Get a sneak peak at the types of questions that will be on the MCAS assessment you'll take in May 2021. When you finish, submit your responses and check your answers.

[Section 1: No Calculator,](#)

[Section 2 - Calculator](#)

[Answers](#)

### Factoring and Solving Quadratics Practice

[Quadratic Math Balloons Game](#)

So fun that once you start playing, you won't be able to stop! If you can beat the highest level, save a screenshot to send to your teacher next year. [DIRECTIONS & OBJECTIVES](#) on slide 7

# Entering Grade 11 Practice

Click the links below to access the math practice options.



## Students Entering Algebra II

[Grade 10 MCAS Practice Section 1 - No Calculator](#)

[Grade 10 MCAS Practice Section 2 - Calculator](#)

Check out the full 2019 Grade 10 Math MCAS. When you finish, submit your responses and check your [answers](#).

[Shape Mods Transformations Practice](#)

Perform a series of translations, reflections and rotations to complete the transformations in as few steps as possible.

[Who wants to be a Hundredaire?](#) Practice simplifying, estimating and performing operations with square roots. [DIRECTIONS](#) on slide 6

## Precalculus, Trigonometry or Honors Algebra II

[Grade 10 MCAS Practice Section 1 - No Calculator](#)

[Grade 10 MCAS Practice Section 2 - Calculator](#)

Check out the full 2019 Grade 10 Math MCAS. When you finish, submit your responses and check your [answers](#).

[Quadratic Math Balloons Game](#)

So fun that once you start playing, you won't be able to stop! If you can beat the highest level, save a screenshot to send to your teacher next year.

[DIRECTIONS AND OBJECTIVES](#) on slide 7

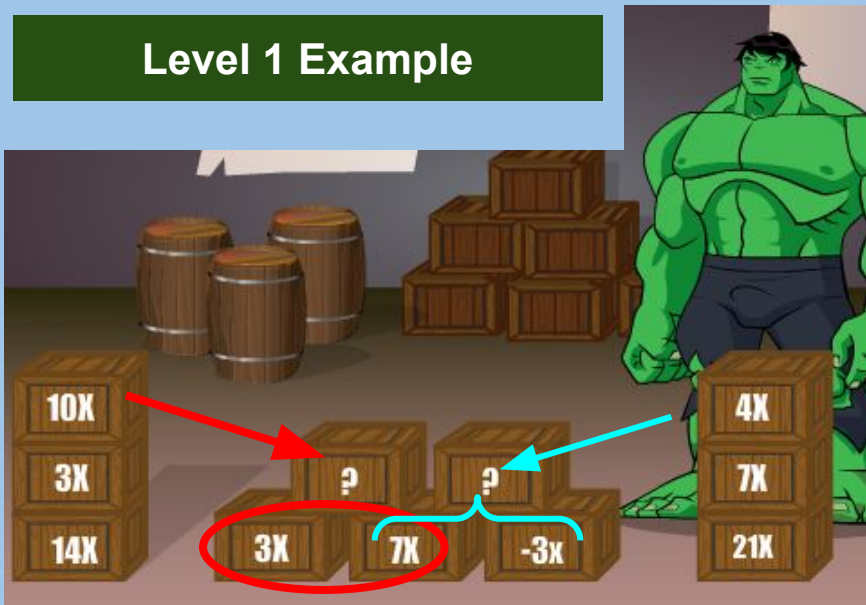
[Shape Mods Transformations Practice](#)

Perform translations, reflections and rotations to complete the transformation in as few steps as possible.

# Algebra SMASH

**Objective:** Add algebraic expressions and solve equations before the Hulk destroys the crates.  
Complete all 12 levels.

## Level 1 Example



1. Add adjacent expressions. Ex.  $3x + 7x = ?$
2. Choose the crate with the sum and drag it over the crate above the two boxes.
3. Repeat until you reach the top of the crate pyramid.

## Level 10 Example



$? + 4x + 2$  must equal  $x$ . Solve for  $?$ .

$$? + 4x + 2 = x$$

$$\underline{-4x - 2 \quad -4x - 2}$$

$$? = -3x - 2$$

# Who wants to be a Hundredaire? Square Roots Practice

## Objectives

1. Approximate square roots to the nearest whole number.
2. Simplify square roots
3. Add, subtract, multiply and divide square roots.
4. Get ten questions correct in a row to become a hundredaire!

You are about to test your knowledge and win up to **\$100 pretend dollars!**

To be successful, you must **CORRECTLY** answer **10 questions** in a row. If you answer a question incorrectly, the game will end.

WHO WANTS TO BE A  
**HUNDREDAIRE**

Submit Final Answer

$2\sqrt{3} - 7\sqrt{3}$

$-5\sqrt{3}$       $-5\sqrt{0}$

$5\sqrt{0}$       $5\sqrt{3}$

QUESTION	PRIZE MONEY
10	\$100
9	\$90
8	\$80
7	\$70
6	\$60
5	\$50
4	\$40
3	\$30
2	\$20
1	\$10

# Math Balloons

This game is addictive!

## Math Objectives

Equations Math Balloons: Determine whether a given value is the solution to an equation.

Quadratic Math Balloons: Determine whether the given values are the correct solutions to the quadratic equation, or determine whether the expression is correctly factored.

## Game Objectives

1. Complete each level by changing all the gray tiles to yellow.
2. Match at least three balloons of the same color vertically or horizontally to change the tile colors to yellow.
3. Put the mouse pointer over a balloon to select an answer. If your answer is right, the balloon will pop and the balloons above it will fall into its place. Then the four horizontal brown balloons will pop, their gray tiles will turn yellow, and all of the balloons above will drop down one space.



*Example: Answer the question in the green balloon correctly. The green one will pop and the brown balloon above it will fall into its place. Then the four horizontal brown balloons will pop, their gray tiles will turn yellow, and all of the balloons above will drop down one space.*