

Algebra Internet Scavenger Hunt

Student Name(s): _____

Introduction

Today you are going to embark on an algebra scavenger hunt! First you will read what algebra is, next you will read about the 'father of algebra' and then you will learn how to balance equations and play some math games on the Internet. Have fun!

Access the Internet and type in <http://poster.4teachers.org/>.

At the bottom right where it says "Search for Posters and Worksheets," click on the drop-down menu and select "**Worksheet ID**" and then key in 125264 as the worksheet code. Click "Search." Click on the ID 125264 on the Search Result page. This will bring up our online Student Directions Worksheet for this activity.

WHAT IS ALGEBRA?

What is algebra? Click on "What is Algebra?" and scroll down to the "fast facts" and read what algebra is. Fill in the missing blanks:

Algebra is a branch of mathematics concerning the study of _____, _____ and _____. Learning algebra is a little like learning another _____. By learning the simple language of algebra, mathematical models of real-world situations can be created and solved. These problems can't be solved by only using arithmetic. Instead of using words, **algebra uses _____ to make statements.**

In algebra, _____ are often used to represent numbers. _____ also uses the same symbols as arithmetic for adding, subtracting, multiplying and dividing.

Click on the "back" arrow until you return to the Web Poster student directions sheet.

WHO WAS THE FATHER OF ALGEBRA?

Next click on "Who was the father of algebra?" Read and look for answers to the following questions:

Who is considered the father of algebra? _____

What is the country known as now where he lived? _____

What is the name of the book he wrote (in English)? _____

What other person is given the title "father of algebra?" _____

Where does the word "algebra" come from? _____

Click on the "back" arrow until you return to the Web Poster student directions sheet.

LET'S REVIEW TERMINOLOGY....

Next click on "Let's Review" and access the math glossary. Click on "e" and read what an 'equation' is. Next click on 'expression' and read what an algebraic expression is. Answer the following question:

Algebra Internet Scavenger Hunt

What must an “algebraic expression” contain? _____

Next click on “b” and read what a ‘balance scale’ is.

Click on the "back" arrow until you return to the Web Poster student directions sheet.

Okay, now let's try to *BALANCE* some *ALGEBRAIC EQUATIONS*.

LET'S BREAK FOR SOME CHOCOLATE MATH

<Stop here and see take out your “Exploring Algebra: Balancing Equations the Chocolate Way” worksheet. You will also need a pencil, 21 M&Ms and 8 chocolate kisses.” Wait for further instructions from your teacher. When you are done with this activity, return to this scavenger hunt to complete the activity.>

BALANCING EQUATIONS WITH VIRTUAL TOOLS

Next click on “balancing equations” and access the National Library of Virtual Manipulatives. Click on “Algebra” and grades “6-8.” Next click on “algebra balance scales – negative.” Click and drag quantities from the bins to balance the equation.

Write down your equation here. _____ Press “continue.”

Once you have balanced your equation. Solve for X by adding, subtracting, multiplying, or dividing by an amount (x or a value) from both sides until you have a single X on one side and amount on the other.

Write down your final answer for x here. _____

Try it again.

Click on the "back" arrow until you return to the Web Poster student directions sheet.

PLAY SOME EQUATION BUSTER!

Click on “equation buster.” In the upper right-hand corner, change the level to “4”. (Don't worry, you can do it!) Now choose to add/subtract/multiply and divide until you ‘bust’ up the equation. The equation is busted when you solve for the unknown and receive a big CHECK for the correct answer. If you solve the equation with the lowest number of steps, you will receive a DOUBLE CHECK. Play until you get a double check.

Click on the "back" arrow until you return to the Web Poster student directions sheet.

AND LASTLY, SOLVE EQUATIONS AND BECOME A MILLIONAIRE! (not really, but have fun anyway!)

Click on “Solve equations and become a millionaire.” Press START. Choose the correct answer from 4 choices to earn money. How many tries did it take you to become a millionaire? _____

CONGRATS! You are now an expert on algebra and balancing equations!