

Learning Activity for Invasion of the Equations 5th Grade

Objective: The students will be able to identify an unknown in a simple equation and solve the problem.

Materials: a variety of word problems

INVASION OF THE EQUATIONS

Invasion of the Equations!
Attack of the Unknowns!

A and B

X and Y

How can we

Identify...

These things, my friends?

We need an equation

For instance, A equals B plus 3

So when we know the value of B

Then we know A. Yeah, that's the key!

When B is known

Then A can be shown

Invasion of the Equations!

Attack of the Unknowns!

J and K

Box and Star

Who can say

What these things are?

It all depends

We need an equation

For instance, Box equals 3 X minus two

Once you know X then you can do

The needed calculations, and you know what Box is, too

When X is found

Then Box comes around

X and Y

A and B

Star and Box

C and D

J and K

F and G

Triangle...

They're not scary

They're just very

Very very very

Variable.

When one of them is known

The other can be shown

When one of them is found

The other comes around

Invasion of the Equations!

Attack of the Unknowns!

Not scary

Just vari...

Able!

Procedure:

- 1) Play the song.
- 2) Discuss unknown, equation, variable.
- 3) Demonstrate the equations from the song.
- 4) The teacher describes a situation that needs an answer. How did they come up with their answer? The answer was the unknown quantity.
- 5) The teacher writes 5 equations on the board, for example, $3 + \underline{\quad} = 5$, $B \times 5 = 30$, $y - 12 = 8$, $36 \div x = 6$, and $25 + d = 34$. Have the students identify the variable in each equation and then solve the equation.
- 6) Read a problem: Old McDonald has a total of 36 pigs and chickens on his farm. If there are 10 pigs, how many of chickens does Old McDonald have? This situation can be represented by the equation $c + 10 = 36$, where c represents the number of chickens.
- 7) Guide students to find the unknown and to solve the problem. Repeat 2 times.

Evaluation: Teacher observation. Students will work 4 additional problems in groups to solve word problems to demonstrate solving for an unknown quantity.