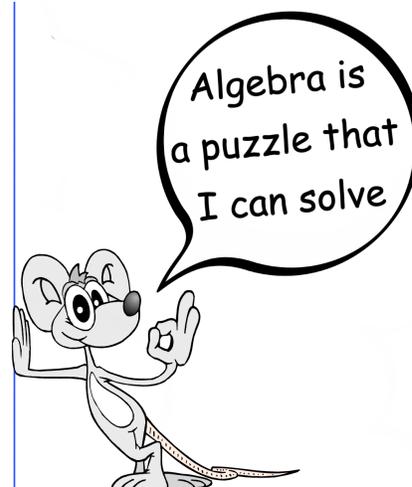


What is Algebra?

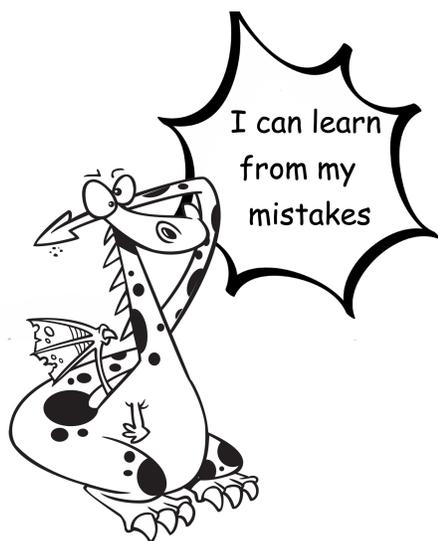
Algebra is more than just a series of equations, it is also a way of thinking logically about the world. Algebra is a process that lets us explore the abstract relationships between different things and then provides us with a way to describe those relationships.

We use variables and other symbols as tools to help us express this abstraction in a way that is easier to work with.



Science Says -- Everyone Can Learn Algebra!

- Believe in yourself. Effort, motivation, and resilience will lead to success.
- People who persevere despite setbacks are more successful.
- Visualizing and making connections will strengthen your brain.
- When you learn how to solve new kinds of problems, your brain grows new neurons and you get smarter.
- Intelligence is learned and not fixed. Your brain actually adapts and rewires itself when you learn new things, and it can do so relatively quickly.



You are a Mathematician, and Mathematicians:

- take on challenges and learn from them
- accept that if they can't do it yet, with effort they will
- grow their understanding of new concepts step by step
- explain their solutions in a way that's easy for others to follow
- know that they will sometimes be wrong, but are willing to try again
- realize that depth is more important than speed



What to do if you get stuck:

- make sure you understand the problem
- draw a picture
- if you can't solve the problem, try to solve a simpler version of the problem
 - use easier numbers
 - keep simplifying the problem until it becomes clear
- work backwards and ask yourself:
 - what am I trying to find out?
 - what information do I need to know?
 - how do I find that information?
- ask questions and seek input from others
 - questions help our understanding of the material and can lead us to new insights
 - talk about what you have tried, discuss what you can do next
- remind yourself that you have overcome setbacks in the past, and you can figure this out



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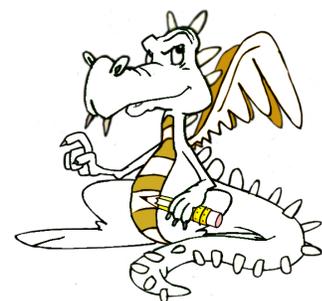
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