



"Our Academic Focus and Comittment to Excellence"

*Our mission is to prepare our students to compete and excel in a **STEM** global workforce.*



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S.T.E.M.



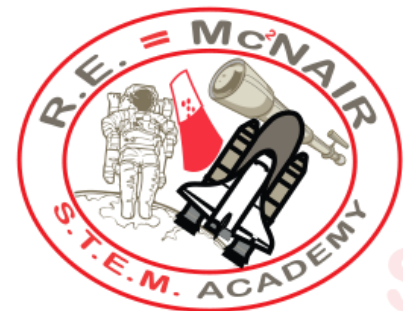


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STEM Education Closing the Gap One Student at a Time



Presented By Kaija Spencer
STEM Coordinator



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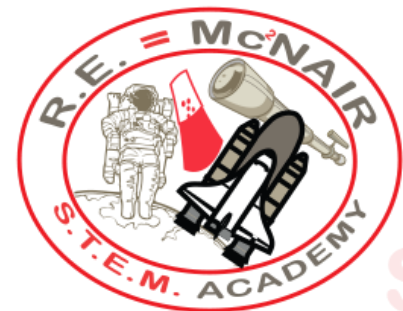




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Agenda

- What does S.T.E.M. mean? What does S.T.E.M. look like?
- STEM Activity: What is Technology?
- Why S.T.E.M. for at-risk students?
- Where should you start?: SWOT Analysis
- Instructional Leaders vs. STEM Team



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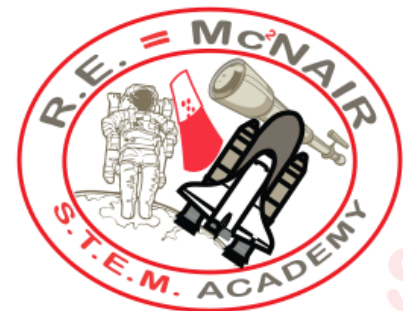
S.T.E.M. is . . .

S – Science

T – Technology

E – Engineering

M – Math



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What does STEM look like ...



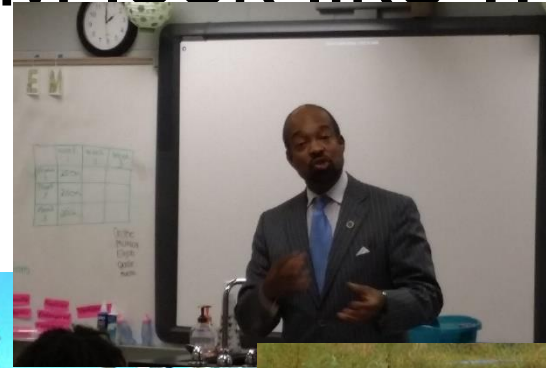
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What does STEM look like ...



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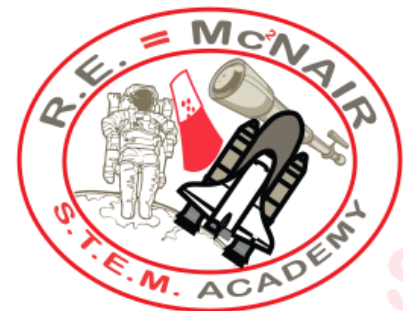
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What does STEM look like ...



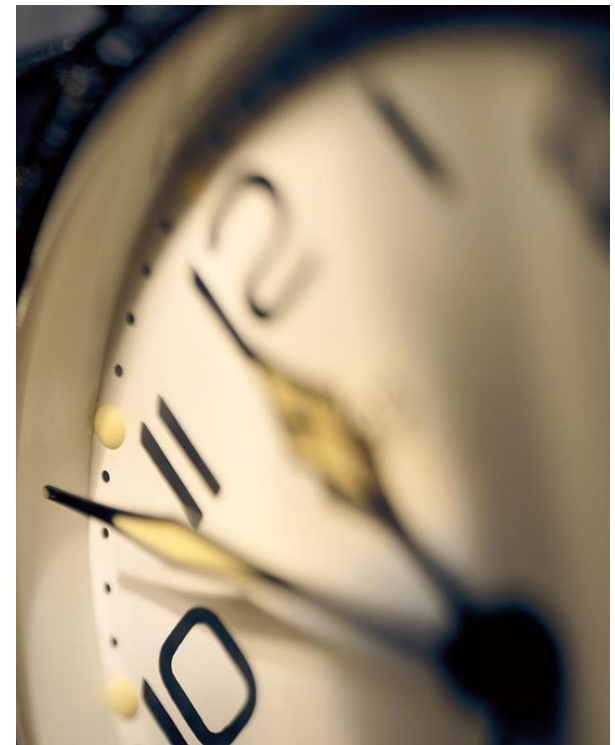
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STEM Activity: What is Technology?



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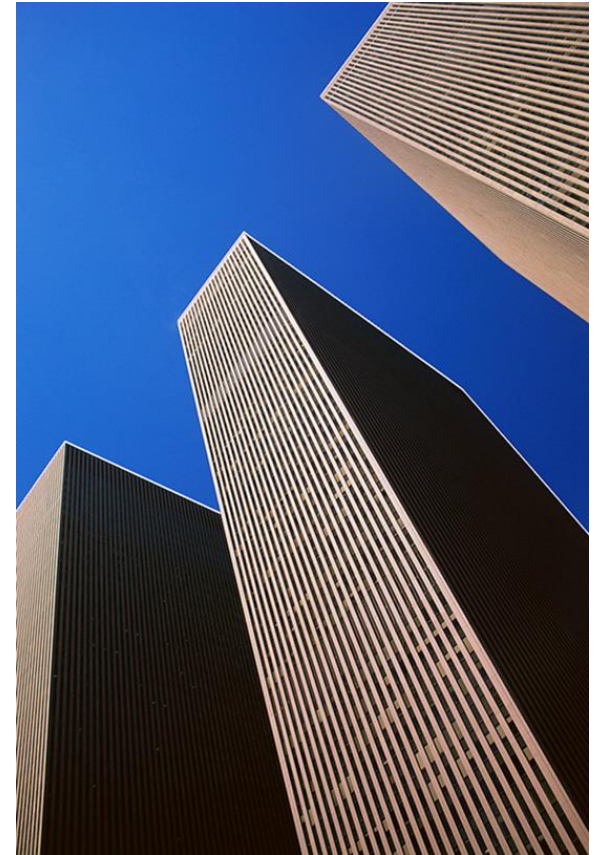


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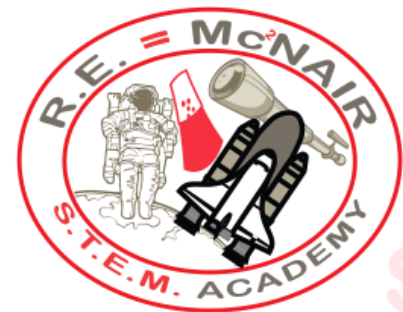
STEM Activity: What is Technology?

Look inside your bag.

Evaluate each item in the bag.

Complete the student side of the Interactive Notebook.

We will share out in 10 minutes.



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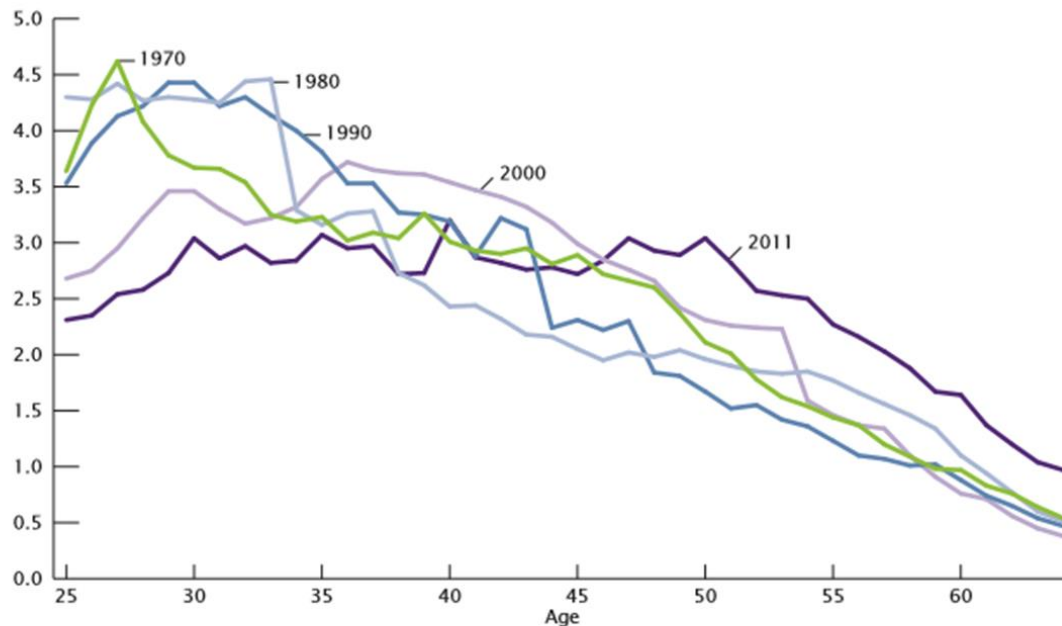
Data to Support STEM for all students

Figure 6.

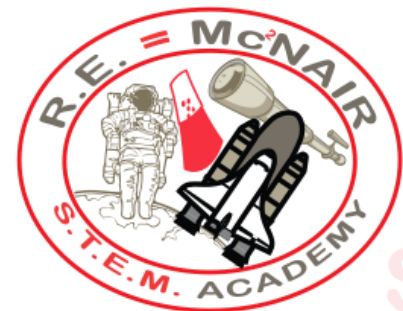
Age Distribution of STEM Workers: 1970 to 2011

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)

Percent distribution of STEM employment



Sources: U.S. Census Bureau, 1970, 1980, 1990, and 2000 decennial censuses and 2011 American Community Survey.



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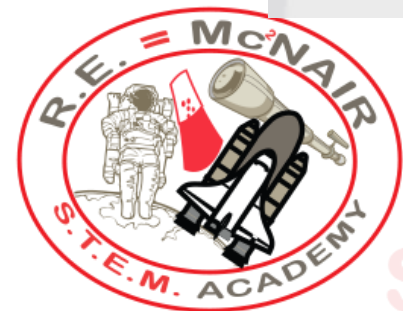
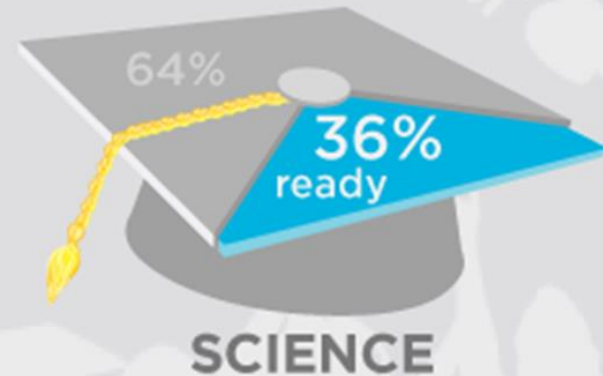
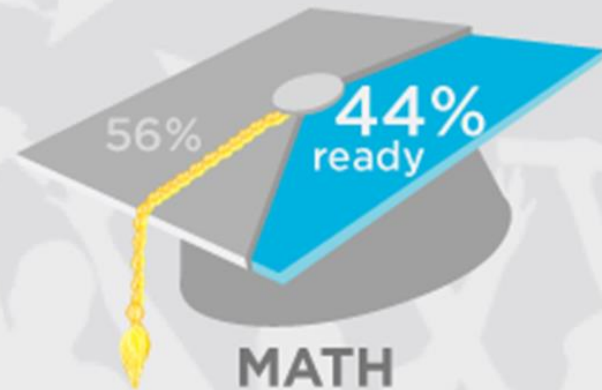


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CURRENT COLLEGE READINESS

Percentage of 2013 U.S. high school graduates ready for college-level courses.



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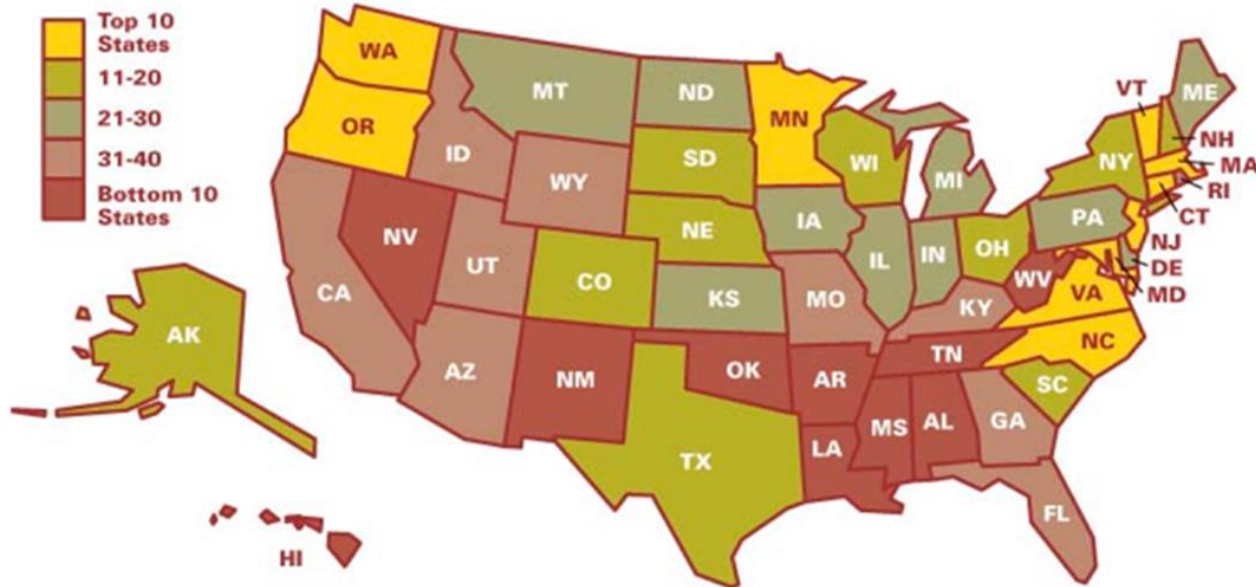




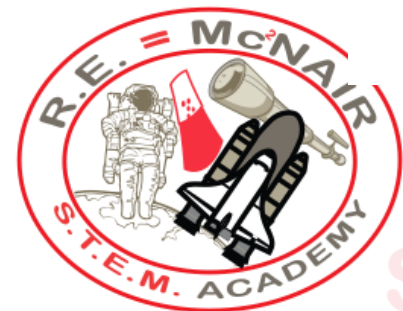
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Percentage of Students at the Advanced Level in Math



<http://educationnext.org/teaching-math-to-the-talented-map/>



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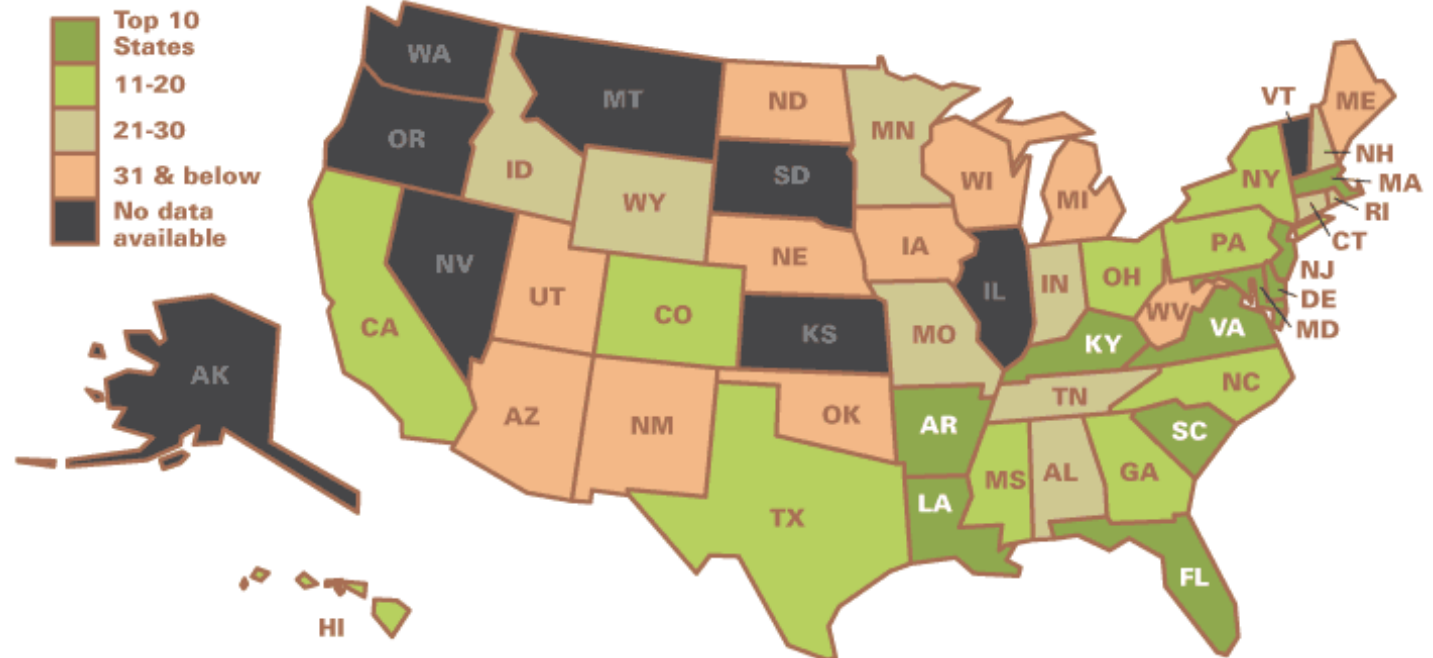




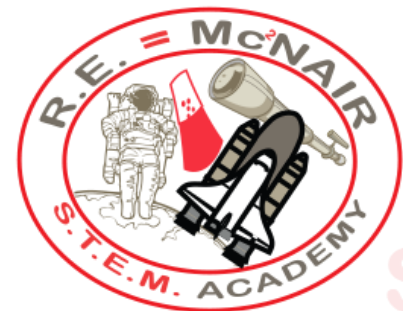
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Annual Rate of Growth in Student Achievement in Math, Reading and Science in 41 U. S. states, 1992-2011



<http://educationnext.org/ednext2012/>



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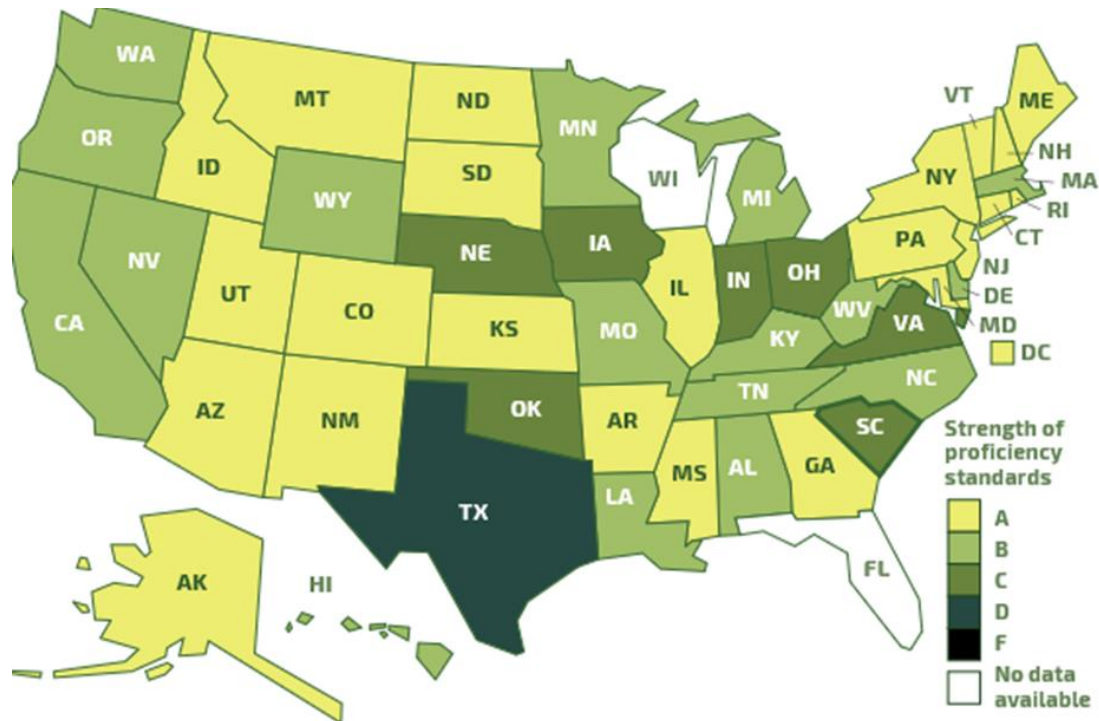




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Rigor of State Proficiency Standards, 2015



<http://educationnext.org/state-standards-map-2016/>

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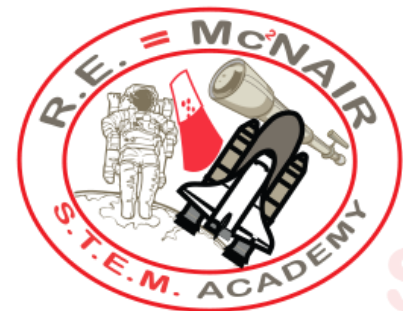
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Additional Data for STEM. . .

National Action Council for Minorities in Engineering, April 2014

National Math + Science Initiative, January 2014

Disparities in STEM Employment by Sex, Race, and Hispanic Origin, 2013



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Additional Data for STEM. . .

Let's look at some Additional Data. . . .

US Census 2013

US STEM Careers Statistics

Women in STEM a Gap to Innovation

African Americans in Engineering



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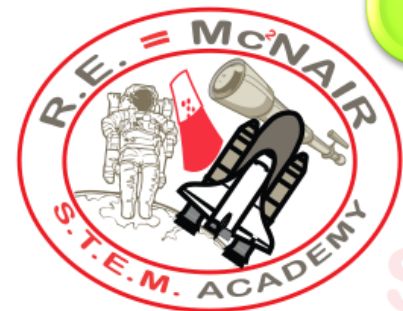
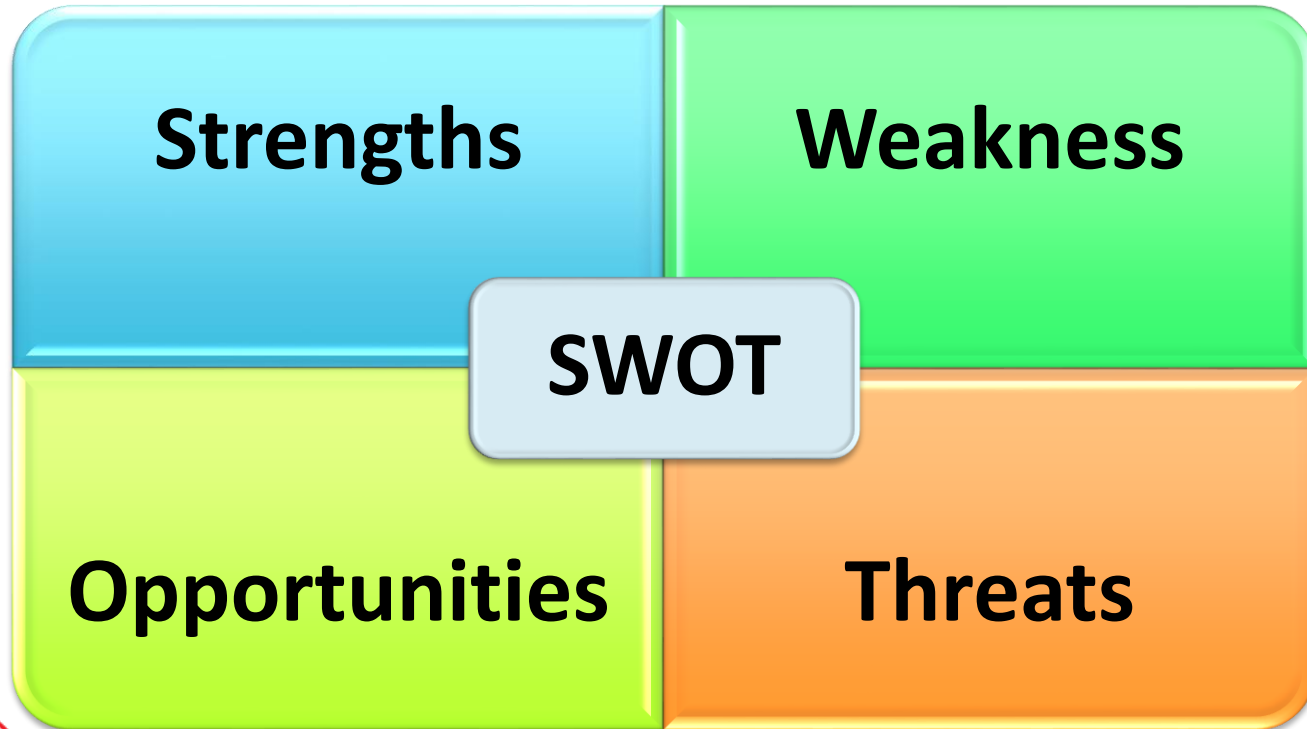
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Where to begin? S.W.O.T. Analysis



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Where to begin? Instructional Team vs. STEM Team

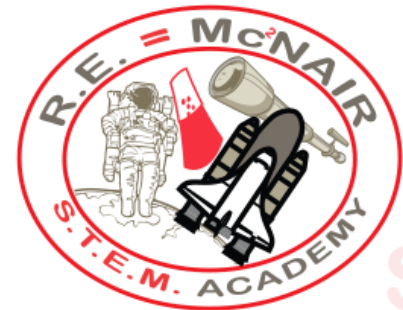
Responsibilities

Instructional Team

- District Teaching goals and requirements
- District trainings and implementations
- Resources to support all content areas
- Collection of data
- Teacher support

STEM Team

- STEM planning of Units and builds
- Integration
- STEM field trips
- Business partners
- STEM focused trainings
- STEM Outreach
- STEM resources and supplies
- Teacher Support



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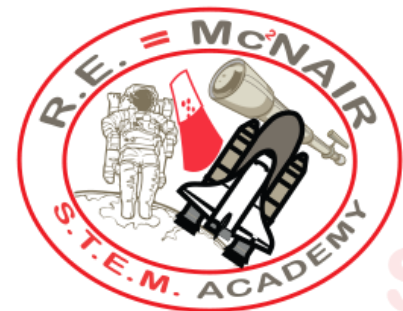
THANK YOU!

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