Online STEM Resources

Below is a list of online sites that are helpful in locating STEM ideas, lessons, activities, etc. Many of the lessons or activities found on these sites can be easily modified to meet the needs of various grade levels, include the Engineering Design Loop process, and to incorporate our Science frameworks and Math standards. However, most are not connected to text or literature (narrative curriculum) but can be easily connected to our ELA units.

These are just suggested sites and are not listed in a particular order.

Teach Engineering

Resources for K-12 – searchable site by level, subject, type of activity, etc.

The Engineering Place

Resources, lesson plans, etc.

Brown Bag STEM Challenges

Blog with fabulous challenges, ideas and strategies for STEM

Play dough to Plato

Neat blog for early elementary...has good ideas that can easily be modified to fit the Design Loop process

eGFI - Engineering, Go For It!

Interactive site: teach students about engineering, meet/read about engineers, etc.

Try Engineering

Resources for K-12 – searchable site by level, subject, type of activity, etc.

PBS Design Squad

Interactive site around "building" or "designing" - with resources for teachers, ideas and contests for kids, instructional videos, and more

Young Engineers

Resources, lesson plans, etc.

Children's Engineering Educators, LLC

Some good ideas from lessons - many can easily be "tweaked" to be more rigorous and incorporate our standards and literature connections

Engineering is Elementary

This is a "for purchase" curriculum but they have some sample lessons and resources available

Awesome Engineering Projects for Kids

Blog with challenges and lessons for STEM – most can easily be modified to work in your grade level

Teachers Try Science

Free lessons, ideas and strategies for STEM

STEM Engineering Resources – Live Binder

Resources include: facts about STEM, resources for teachers, links to sites and blogs, student resources, and more

I-STEM Resource Network

Resources for PreK-12 – searchable site by level, subject, etc

<u>STEM – Live Binder</u>

Resources include: facts about STEM, resources for teachers, links to sites and blogs, student resources, and more

4-10-14 Rogers Public Schools

We Can Change the World – Siemens and Discovery Education

Resource section with ideas, lesson plans, literacy connections, and more

We are Teachers

Ideas, Information, and Inspiration – resources and lessons, grants and contests, and more

National Science Digital Library

Resources for STEM

A to Z Teacher Stuff

Free lesson plans in a variety of subject areas – many of the science plans can be adjusted to fit the design loop process

Hot Chalk Lesson Plans

Free lesson plans in a variety of subject areas – many of the science plans can be adjusted to fit the design loop process

Science Kids

Facts, topics, experiments, lessons, games and more

STEM - ADE

Arkansas Department of Education site to support STEM education – provides STEM foundations with videos from classrooms and associated materials for the lessons.

Florida Engineering Society K-12 Classroom Resources

Classroom resources and links

STEM Collaborative

Resources and lessons

Discover E

Videos and hands-on activities – many can be adapted to use the design loop process

NASA – for Educators

Resources, articles, lessons and more from NASA

Sally Ride Science

Resources, articles, lessons, videos, and more

UASTEM

Resources that include presentations and activities from the University of Arkansas Integrated STEM Education department - "2013 UA STEM Problem Solving Activities" and "2014 UA STEM Problem Solving Activities" are both LARGE files with many narrative curriculum STEM challenges ready to use in your classroom

Engage

Resources and lessons – funded by a grant from the National Science Foundation

Orange County Public Schools STEM Resources

not all of these are "available" to the public, but a few are

Elementary School Web Sites:

Showcase STEM with examples of STEM in their school, Design Briefs/projects, and house other STEM related resources:

Liberty Elementary School

Jennie Dean Elementary School