## School Age Curricular Framework Easy Sheet

## STEM - Science, Technology, Engineering and Math Level 2





Science, Technology, Engineering and Mathematics includes providing 21st century skills that prepare children and youth for a global society. It should be hands-on and increase analytical and critical thinking skills.

| thinking skills. |   |
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| Rationale        | <ul> <li>★ Opportunities for Collaboration and teamwork</li> <li>★ Ability to express creativity and imagination</li> <li>★ Demonstrate critical thinking and problem solving skills</li> <li>★ Understand how the world works</li> <li>★ Plan implement, interpret results of experiments</li> <li>★ Hypothesis and record observations</li> </ul>   |
| Examples         | Materials  ★ UConn STEM resources for Teachers  ★ PBS Learning Media for Teachers  ★ STEM resources by NASA  ★ National inventors Hall of Fame STEM resources for educators  Activities  ★ Build bridges out of different materials and test the strength  ★ Speed stacking  ★ Testing buoyancy of toys and objects in a water tub  ★ Paper airplane flying and creation  ★ Jenga and other balancing/ building games  Interactions  ★ Set up partnerships with STEM content experts (For Example Mad Science)  ★ conduct simple experiments  ○ Ask what the students think the outcome will be  ○ Create/ write hypothesis with kids  ★ Notes for Next Time: (time used, reactions to activity, staff/children interactions) |
| Resources        | <ul> <li>★ UConn STEM resources for Teachers</li> <li>★ PBS Learning Media for Teachers</li> </ul>  |

- ★ STEM resources by NASA
- ★ National inventors Hall of Fame STEM resources for educators
- ★ Afterschool Alliance <a href="http://www.afterschoolalliance.org/STEM-curriculum.cfm">http://www.afterschoolalliance.org/STEM-curriculum.cfm</a>
- ★ You for Youth (math, literacy, science, arts, technology, homework) <a href="https://y4y.ed.gov/en/toolkits/afterschool/math">https://y4y.ed.gov/en/toolkits/afterschool/math</a>