



**DreamUp Components**

version 1.0

**The goal of this project is to inspire and empower young people to develop the skills and knowledge to design, develop and propose an experiment that could be run on the international Space Station**

**In partnership with DreamUp, teams design and propose an experiment that uses microgravity as the variable while developing competencies in collaboration, communication and problem solving connected to space exploration.**

**Each component has a related folder with a facilitator and learner guide**

Component/learner check	Learner outcomes in kid friendly language
<p><a href="#">A. ISS/Our place in solar system</a></p> <ul style="list-style-type: none"> <li>● Webquest</li> <li>● Model</li> <li>● Vocab quiz</li> </ul>	<ul style="list-style-type: none"> <li>● I understand the mission and the collaborative nature of ISS</li> <li>● Using a scale model, I have a sense of where ISS is in comparison to the moon and our solar system</li> </ul>
<p><a href="#">B. Gravity vs MicroG</a></p> <ul style="list-style-type: none"> <li>● Model/Interact with ISS video experiments</li> <li>● Vocab quiz</li> </ul>	<ul style="list-style-type: none"> <li>● I can explain the notion of gravity</li> <li>● I can explain microgravity and give examples of it on earth</li> <li>● I understand the challenge that microgravity presents to long term presence in space</li> </ul>
<p><a href="#">C. Scientific Process &amp; Experimental Design</a></p> <ul style="list-style-type: none"> <li>● Model/diagram of process</li> <li>● Simulated mixstix for each team</li> </ul>	<ul style="list-style-type: none"> <li>● I understand the nature of the scientific process</li> <li>● Our question and experiment has used only one variable, Microgravity</li> <li>● I can identify parts and set up a controlled experiment in a simulated MixStix</li> </ul>
<p><a href="#">D. Research &amp; Connection to Expert</a></p> <ul style="list-style-type: none"> <li>● Emails, documented</li> </ul>	<ul style="list-style-type: none"> <li>● I can find research that is pertinent to our question</li> <li>● I can collaborate with experts to gain guidance and insight</li> </ul>
<p><a href="#">E. Written Proposal</a></p> <ul style="list-style-type: none"> <li>● Guides</li> <li>● Rubrics</li> </ul>	<ul style="list-style-type: none"> <li>● I can follow a grade appropriate guide and use a rubric to write a proposal for an experiment that could be run on ISS</li> </ul>
<p>F. Science Poster</p> <ul style="list-style-type: none"> <li>● Google slides</li> </ul>	<ul style="list-style-type: none"> <li>● I can use a template to create a presentation of our learning</li> </ul>

- Template