

UNIT PLANNING WITH NGSS

This UbD based template could be used to... ..when planning units or lesson for the NGS Standards.

Understanding by Design Template¹	
<p>Understandings: [Could be used to...] Students will understand that...</p> <ul style="list-style-type: none"> - ID the big picture content understandings <ul style="list-style-type: none"> o e.g. Why does weather constantly change? - Include the crosscutting concepts <ul style="list-style-type: none"> o <i>2. Cause and effect: Mechanism and explanation</i> o <i>5. Energy and matter: Flows, cycles, and conservation.</i> <ul style="list-style-type: none"> ▪ e.g. Where does the energy come from that creates changes in weather? 	<p>Essential Questions: ... [Could be used to...]</p> <ul style="list-style-type: none"> • ID the big picture goals for the [a period of time] as found within this particular unit or lesson. The goal can be connected to crosscutting concepts. <ul style="list-style-type: none"> o e.g. <ul style="list-style-type: none"> ▪ How do organisms influence the world around them and how do the structures in the world influence organisms? (cause and effect) ▪ What big effects and what small effects do people have on the world? (cause/effect, scale, modeling)
<p>Student will know... [Could be used to...]</p> <ul style="list-style-type: none"> • ID/list the vocabulary and <u>the</u> most important aspects or practical details of a subject. <ul style="list-style-type: none"> o e.g. <ul style="list-style-type: none"> ▪ air pressure, tornado, high pressure vs. low pressure, systems ▪ formulas or specific ideas <ul style="list-style-type: none"> • all things that can be accessed via Google or Wikipedia 	<p>Student will be able to... [Could be used to...]</p> <ul style="list-style-type: none"> • ID the science and engineering practices that will be employed • e.g. <ul style="list-style-type: none"> o Ask questions related to prairie ecosystems. o Collect and analyze sample data, argue with evidence based on that data. o Construct a model of gas diffusion.
<p>Assessment... [Could be used to...]</p> <ul style="list-style-type: none"> • Link to the performance expectation(s)--which PEs does this unit or lesson build toward? • How are students going to show that they understand, know and can do the things identified? • Consider formative assessments, summative assessments, performance-based assessments, and non-traditional 	

¹ Adapted from a template found @ <http://www.cesa2.org/programs/stem/NGSS.cfm>

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assessments (portfolios, projects, lab notebooks, etc.).