

**Experiments With Plants**  
**March 2, 2012**

10 weeks

Standards	Assessment/ Student Evidence	Academic Vocabulary	Resources
INQB Different kinds of questions suggest different kinds of scientific investigations.	<ul style="list-style-type: none"> <li>Plan and conduct different kinds of scientific investigations like a field study, observation, controlled experiment, a model or simulation that matches the question being asked.</li> </ul>	Investigation Field study Controlled experiment	<i>Experiments With Plants</i> Teacher Guide by NSRC/STC
INQA Scientific inquiry involves asking and answering questions and comparing the answer with what scientists already know about the world.	<ul style="list-style-type: none"> <li>Generate a question that can be answered through scientific investigation. This may involve refining or refocusing a broad and ill-defined question.</li> </ul>		
INQD For an experiment to be valid, all (controlled) variables must be kept the same, except for the manipulated variable being tested and the responding variable being measured and recorded. If a variable cannot be controlled, it must be reported and accounted for.	<ul style="list-style-type: none"> <li>Plan and conduct valid controlled experiments by testing the relationship between two variables and keeping other variables the same.</li> </ul>	Manipulated (independent) variable Responding (dependent) variable Controlled variable	

Power Standards in green

Complementary Standards in yellow

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INQG Scientific reports should enable another investigator to repeat the study to check the results.	<ul style="list-style-type: none"> <li>Summarize an investigation and its results using evidence and identify limitations of the investigation.</li> </ul>	Conclusion Data Evidence Results	
INQH Science advances through openness to new ideas, honesty, and legitimate skepticism.	<ul style="list-style-type: none"> <li>Recognize flaws in scientific claims, such as uncontrolled variables, overgeneralizations, and experimenter bias.</li> </ul>		

Power Standards in green

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