# Module 1 Lesson 3

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| **Title** | What is a potato tower? |
| Overview | Students view videos and preview websites to plan, design, build, and plant a potato tower. |
| Standards | K-LS1-1--Use observations to describe patterns of what plants and animals (including humans) need to surviveK-ESS3-1--Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.K-ESS3-2--Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weatherELA.K.W.C11.1 participate in shared research and writing projectsELA.K.W.C11.2 with guidance and support recall or gather informationELA.K.SL.C13.1 participate in collaborative conversationsELA.K.SL.C14.3 speak audibly and express thought, feelings, and ideasELA.K.SL.C15.1 demonstrate command of conventions of standard English grammar and usage21C.O.PK-2.1.LS.2 Student can accurately interpret and create simple visuals (e.g. charts, maps, graphs and models) and use this information to solve problems and communicate information21C.O.PK-2.1.LS.3 Student articulates thoughts and ideas, representative of real and imaginary experiences, clearly and effectively through oral, written or multimedia communication21C.O.PK-2.2.LS.1 Student engages with teacher assistance in a critical thinking process by conducting basic evaluations using simple criteria21C.O.PK-2.3.LS.1 Student manages negative emotions, aligns his/her goals to the goals of others, and works cooperatively and productively with others in small groups21C.O.PK-2.3.LS.5 Student uses clearly defined teacher directions and interpersonal skills to move others toward the goal21C.O.PK-2.3.LS.6 Student focuses on a project goal, and with teacher guidance, frames appropriate questions related to the goal, considers possible courses of action, selects a plan of action and completes the project. |
| **Materials/Advance Preparation Needed** | Computer lab or mobile laptopsPre-selected websites for building potato towers (here are two to start with)<http://www.backyardfarmingconnection.com/2013/04/potato-towers.html> <http://www.youtube.com/watch?v=tyt3GuoYJ7k> Science journalsPencils/crayonsStudents divided into predetermined groups of 4Chart paper/markersChicken wireStrawSoilSeed potatoes |
| **Procedures/Steps** | 1. Introduce lesson by asking the question: What is a potato tower? Before students preview any images, direct students to draw and label a potato tower in their science journals.
2. Take students to computer lab or use mobile laptops to allow students to view various sites with photos and videos of how to build a potato tower.
3. Place students in predetermined small groups of 4 and have them choose jobs of artist, planner, materials person, and presenter. Discuss what each job will entail and have students think about their own skills as they plan which job they want to do.
4. Using science journals, and referring back to websites if necessary, artist draws what potato tower will look like, planner assists artist by describing what to do (and reviewing websites), materials person composes list of necessary materials, and presenter shares the group’s plan with the class.
5. After each group has presented, as a class, write a plan for design, materials, and steps needed to create a potato tower.
6. Plan for materials and assistance if needed and as able, build and plant potato tower.
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| **Assessment (What will be the evidence of student learning?)** | Teacher will assess science journals for students' ability to use information viewed in websites in order to create a model and a plan that includes a sketch, materials, and steps to successfully grow potatoes. Teacher will monitor students’ cooperative learning skills for ability to work in groups and manage group projects. |