

Lesson	Activity	@Home Lesson	Activity Description	Suggested Modality	Reasoning	Teacher/Student Provided Materials	Consumable Materials	Non-Consumable Materials	LAUSD Replacement Materials
1.3	1	3	Students build a simple electrical system (a simple circuit) powered by a solar panel.	watch video	Safety Note: In this activity, students build a simple electrical system. Ensure that students do not clip the alligator clips to their skin; while there is no danger of electrical shock, the clips themselves can damage skin and cause pain. Ensure that students keep the moving fan away from their faces. All electrical investigation materials should be kept away from electrical outlets and water. If you choose to use a lamp with an incandescent bulb to power your students' circuits, secure the lamp and caution students not to touch the bulb or the top of the lamp as they will both grow hot very quickly.				
1.5	1	5	Students build simple electrical systems and observe devices that produce motion, light, or sound as energy outputs	watch video					
2.2	1	8	Students use the Energy Conversions Sorting Tool to identify the input and output energy forms of various energy converters.	hands-on	Students will access the sorting tool in the student apps page of Amplify Science.		NA	NA	
2.3	2	9	Students receive a message from the City Planner explaining recent changes in Ergstown. They discuss the changes and sort them into categories	hands-on					
2.3	4	9	The teacher uses a model to demonstrate the concept of limited energy in the electrical system.	hands-on	Students will access the sorting tool in the student apps page of Amplify Science. Teacher will demonstrate or use the video to show what happens when multiple devices are plugged into one system.	Changes in Ergstown Cards			
3.2	2	12	Using the Energy Conversions Sorting Tool, partners sort energy converters based on their function in the electrical system.	hands-on	Students will access the sorting tool in the student apps page of Amplify Science.				
3.4	3	13	Students design wind turbines that spin when moving air blows over them	hands-on	Safety note: Students should keep fingers and all materials away from the fan when it is functioning—nothing should be placed near the spinning fan blades. Students should exercise caution when handling the push pins and should keep them away from each other's faces, using them only to connect the spinning parts of their turbines to the pencil eraser. In place of a fan, students could try blowing on their wind turbine. This activity affords students the opportunity to engage in the design cycle as they consider criteria and design, make, test, and refine their wind turbines.	pencil with an eraser, tape		push pin, plastic cup, disposable plates, craft sticks	push pin, plastic cup, disposable plates, craft sticks
3.5	3	NA	Students engage in another iteration of the design cycle as they redesign, test, and refine their wind turbines.	hands-on	Redesign and test of their wind turbines.	Materials from previous lesson		Materials from previous lesson	Materials from previous lesson
4.1	2	15	Students build simple electrical systems and cause them to fail. Then they try to figure out why another group's system failed.	watch video	This is a group activity where students observe one another. They try to figure out why there is a system failure.				
4.2	2	16	Students are introduced to the function of the electrical grid through a demonstration	watch video	Demonstration with discussion after.				