Science 9 **Electric House Project**

Name: Date: Block:

Scissors

Your task is to create a model house with fully complete circuits as outlined below. You will be working in groups of 2-3 students and will be assessed according to how well you met the criteria.

Criteria:

Each "house" must include a minimum of the following:

- Four rooms with at least one light bulb per room (each room should have its own design/theme)
- A switch that will turn each light in each room on or off
- A main switch that will turn all four lights on or off at once
- All decorative materials used MUST be environmentally friendly, recyclable, and DIYed

You will be supplied with the following by your teacher:

- Wires
- Paper clips • Light bulbs Fasteners Pencil crayons •

Your group must supply your own 9 V battery and house-building materials (i.e. cardboard box, decorative materials, etc.)

Draw your schematic diagram (USE A RULER!) for this circuit below:

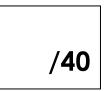
TEACHER CHECK: (Must be checked and stamped/initialled before you can begin; DO NOT LOSE THIS SHEET! This will be handed in as part of your final assessment)

MARKING OF ELECTRIC HOUSE:

	Emerging	Developing	Proficient	Extending
Circuit Construction	Circuit does not work and/or is	Circuit has a difficult time	Each light bulb is controlled by	Each light bulb is controlled by
	not the correct circuit	turning on and needs to be adjusted in order to turn the	a switch located in the room	a switch located in the room
	Master switch does not work	light(s) on	Circuit works, but switches are	Circuit works smoothly and
	or is missing		tough to manipulate	lights can be turned on and off
		Circuit only works once or twice		multiple times without needing
	Circuit diagram is incomplete		Master switch controls the	to be adjusted
	and/or not correct	Master switch controls most of	light bulbs, but are difficult to	The second second state in the second second second
		the light bulbs, but not all	manipulate	The master switch controls all of the light bulbs and can be
		Circuit diagram is done in pen	Circuit diagram is done with a	used multiple times without
		Circuit diagram is done in pen	ruler and pencil	needing to be adjusted
				Circuit diagram is done with a
				ruler and pencil and is an
				accurate depiction of the
				circuit built
Presentation	Most wires are not trimmed and it is difficult to understand how the circuit is built	Some wires are trimmed, but many can still be seen when looking at the house	Most wires are trimmed, but can still be seen when looking at the house	Wires are trimmed and hidden from sight
	now the cheat is ball	looking at the house		The electron pathway can
	Switches are located outside of	It is somewhat difficult to figure	The electron pathway is	easily be followed
	the rooms and are difficult to	out which wire corresponds to	somewhat easy to follow	
	access	which part of the circuit	along with	Switches are located in each of
		diagram		the rooms and are easy to
			Switches are located in the	access
		Switches are located outside of	rooms, but are difficult to	
		the rooms	access	
Creativity	There is minimal or no design	Only one or two of the rooms	Each of the rooms have their	Each of the rooms are well
	elements within the rooms of the house	have a design	own design	designed and have their own unique theme
	the house	Some design elements are	Most pieces within the house	unique trieme
	Design elements are taken	DIYed, but some are taken from	are DIYed and can be recycled	Both the inside and outside of
	from other places and cannot	other places	are pried and can be recycled	the house is well decorated
	be recycled			
				All pieces within the house are
				DIYed and can be recycled
Conduct	Student is often off task and	Student is on task, but requires	Student is on task, but can be	Student is always on task and
	requires many reminders to	reminders from the teacher to	distracted by either their	makes effective use of class
	stay on task	stay on task	group members or those	time
		1	around them	1
	When faced with set-backs,	When faced with set-backs,		When faced with set-backs,
	student often asks for	student often asks for	When faced with set-backs,	student tries to work together
	student often asks for assistance from the teacher	,	When faced with set-backs, student tries to work together	student tries to work together with their group in order to
	student often asks for assistance from the teacher and/or stops participating in	student often asks for assistance from the teacher	When faced with set-backs, student tries to work together with their group but will ask	student tries to work together
	student often asks for assistance from the teacher	student often asks for assistance from the teacher Student does their part in the	When faced with set-backs, student tries to work together	student tries to work together with their group in order to come up with a solution
	student often asks for assistance from the teacher and/or stops participating in the assignment	student often asks for assistance from the teacher Student does their part in the group assignment, but does not	When faced with set-backs, student tries to work together with their group but will ask the teacher for assistance	student tries to work together with their group in order to come up with a solution Student is hands-on and
	student often asks for assistance from the teacher and/or stops participating in the assignment Student does not complete	student often asks for assistance from the teacher Student does their part in the	When faced with set-backs, student tries to work together with their group but will ask the teacher for assistance Student participates in their	student tries to work together with their group in order to come up with a solution Student is hands-on and contributes fully to their group
	student often asks for assistance from the teacher and/or stops participating in the assignment	student often asks for assistance from the teacher Student does their part in the group assignment, but does not	When faced with set-backs, student tries to work together with their group but will ask the teacher for assistance	student tries to work together with their group in order to come up with a solution Student is hands-on and

Individual assessment portion ***Occurs on the day that the assignment is due

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For this project, I will be responsible for bringing to class...

My group members are...

1.)	Contact information:
2.)	Contact information:

For each of the days that we work on this project, students will be responsible for cleaning up their workstation at the end of the class. Please ask the teacher to check your workstation. This must be completed at the end of each work block before students can leave the classroom.

Day 1 Teacher Initial: _____

Day 2 Teacher Initial: _____

Day 3 Teacher Initial: _____

Day 4 Teacher Initial: _____

Day 5 Teacher Initial: _____