

## Day-Wise Activity Plan for DIY Premier Junior Electronics Camp For Grade: 6-8

Workshop duration: 1 hr 40 mins each day

Day No.	Topic	List of Workshop Experiments and Agenda	Home Projects
1	Battery, Voltage, Current, LED, Breadboard, Resistor, Color Coding, Multimeter	<ol style="list-style-type: none"> <li>1. Measuring voltage using a multimeter</li> <li>2. Continuity test of an LED</li> <li>3. Measuring resistance using a multimeter</li> <li>4. Glowing an LED</li> </ol>	1. Beeping a buzzer
2	Buzzer, Variable resistors: Potentiometer, Preset and LDR,	<ol style="list-style-type: none"> <li>1. Glowing an LED using an LDR</li> <li>2. Glowing an LED using a Potentiometer</li> <li>3. Glowing an LED using a Preset</li> </ol>	2. Alternate glowing of LEDs using a Preset
2	Circuit combinations	<ol style="list-style-type: none"> <li>1. Series combination of LEDs</li> <li>2. Parallel combination of LEDs-1</li> </ol>	3. Parallel Combination of LEDs-2
3	Switches	<ol style="list-style-type: none"> <li>1. Continuity test of an SPDT switch</li> <li>2. Controlling an LED using an SPDT switch</li> </ol>	4. Staircase Lighting
4	Capacitors	<ol style="list-style-type: none"> <li>1. Alternate glowing of LEDs using an SPDT switch</li> <li>2. Charging and discharging a capacitor</li> <li>3. Spark creation</li> </ol> <p><b>Quiz-1</b></p>	
5	Relay	<ol style="list-style-type: none"> <li>1. Continuity test of relay using a multimeter</li> <li>2. Alternate glowing of LEDs using a relay</li> </ol>	
6	Semiconductors, Diode	<ol style="list-style-type: none"> <li>1. Burglar Alarm-Type 1 and Type-2</li> <li>2. Working of diode</li> </ol>	5. Relay as Oscillator



A DIY STEM Kits & Solutions Company

Day No.	Topic	List of Workshop Experiments and Agenda	Home Projects
8	DC Motor	<ol style="list-style-type: none"><li>DC Motor as Generator</li><li>Controlling speed of DC motor</li></ol> <p><b>Quiz-2</b></p>	
9	Introduction to transistors	<ol style="list-style-type: none"><li>Touch activated switch</li><li>Automatic night lamp</li></ol>	
10	Transistor Application-1	<ol style="list-style-type: none"><li>LED Flasher</li><li><b>Grand Challenge: Darlington Pair</b></li></ol>	
11	Transistor Applications-2	<ol style="list-style-type: none"><li>Alternate blinking of LEDs using transistors</li></ol> <p><b>Quiz-3</b></p>	
12	Concluding Class	<ol style="list-style-type: none"><li>Tips and techniques</li><li>Voltage divider</li><li>Q &amp; A and doubts</li></ol> <p><b>Results of Quizzes, Fastest Circuit Maker, Grand Grand Challenge- Winner</b></p>	

**Note:**

Please note that the above curriculum is subject to minor changes or shuffling of topics between various days depending upon how much material is covered by the instructors in a day. All topics will be covered by the instructors and if necessary, complimentary hours will be put in to cover the curriculum. Any changes will be updated via email.

For any questions, please contact us directly at [support@mandlabs.com](mailto:support@mandlabs.com)