



[SUPPLEMENTARY RULES]

1. Rules of Activity

- a) The participant has to use the electronic components provided by the organizer to make a design work and put it on a base of A4-size within the time limit. Participants can bring a picture for reference when making their works. Requirements for each group are listed below:
 - Group A (Primary 1 to 4): 2-dimensional or 3-dimensional work, theme not limited;
 - Group B (Primary 5): 3-dimensional work, theme not limited;
 - Group C (Primary 6): 3-dimensional work, the theme is “My Playground”.
- b) Before the activity starts:
 - Each participant will be provided with an “A4-sized matt”, “Point Redemption Coupons” and two 1.5V AA batteries.
 - The “Point Redemption Coupons” are used for redeeming materials. For detailed redemption rules, please refer to the **Points Redemption Coupons** and **Conversion Table**. The un-used points will be counted as additional scores.
 - Each team has two minutes to redeem for their materials. Once redeemed, the materials cannot be returned.
 - Due to the limited time, participants are advised to plan for the types and quantities of their materials, and check that they have enough points for redemption.
- c) After the museum staff has announced the start of time-keeping:
 - All teams should start making their design work.
 - They can choose their required types and quantities of components, and use their “Points Redemption Coupons” to redeem for them with our staff, without limit on the number of times of redemption.
 - The teams can agree among themselves for exchange of their materials on hand.
- d) **The competition time is limited to 2 hours.** When time is up, the participants have to stop and put their works in the indicated location according to the instruction of the staff. Then they have to register for the quantities of their remaining “Points Redemption Coupons” in order for the judges to evaluate their works.

2. Scoring Criteria

- a) Creativity (40%): Creative, unique and innovation features.
- b) Artistic Design (40%): The name, theme and design of the creative work should match mutually. Visual effect, colors and motion.
- c) Completeness (20%): Stable construction and its sophistication, use of science theories & techniques (e.g. on/off switch, sound, movement or rotation, etc.) and the tidiness of working table.

3. **Tools:** The organizer will provide tools such as scissors, tapes, sharp-nose pliers, flat-nose pliers, pens, paper and hot melt adhesives (shared). Participants are welcome to bring their own tools, but dangerous tools are prohibited (soldering iron, electric drill, etc).

4. Points Redemption Coupons and Conversion Table

- a) There are 3 types of “Points Redemption Coupons” for redeeming different types of materials.

<u>Values of Coupons</u>	<u>Face Values of Coupons</u>				
- Electronic components, 240 points in total.	1	2	5	10	20
- Supplies, 120 points in total.	1	2	5	10	20
- Decorative parts, 60 points in total.	1	2	5	10	20



b) Conversion Table:

Supplies			Electronic Components		
Coupons with 120 points			Coupons with 240 points		
Name	Color/Features/Model	Points required	Name	Color/Features/Model	Points required
Fiber	Transparent, 50 cm	1	Resistor	Light brown/ Blue	1
Printed circuit board (PCB)	Large, 9cm * 15 cm	40	Variable resistor	White & blue	2
	Medium, 7cm *9 cm	20	Photoresistor	Red	2
	Small, 5cm *7 cm	10	Electrolytic capacitor	Black, large	2
Hard wire	50 cm	1	Electrolytic capacitor	Black, small	1
Soft wire	Red, yellow, green, blue, black, white	1	Ceramic capacitor	Yellow & Orange	1
3.5mm audio plug		2	On/off switch	Trigger, long handle, DPDT, Large Push Button	5
AC adapter		2		Small Push Button	2
Screw Terminal	Screw Terminal	2		Switch	1
			Integrated circuit	DIP 8, 14, 16	5
			IC Holder	DIP 8,14,16	2
			Triode (BJT)		2
			LED 5mm	Resin-red, green, yellow, orange, blue	2
				Transparent, semi-transparent (red)	
			LED 3mm	Resin-red, green, yellow, Transparent (red)	1
			LED 10mm	Resin-red, green, yellow Semi-transparent (red)	5
			Buzzer	Black	5
			Electronic beeper	Circular, copper & white	
			Musical/audio IC		2
			Motor		10
			Alligator clip	Black, red	5
			PIN Header	Single, double	5
			Battery case		10
			Battery case with LED/buzzer (soldered)		20

Decorative parts		Coupons with 60 points
Name		Points required
Straw Thick		1
Thin		
Toothpick		1
Bamboo sticks		
Cardboard		1
Art paper		
Ribbon		1
Fishing line		1
Paper cup		1
Wood clip string		2
Ping-pong ball		2
Colored A4 paper		2

* Participants can bring their own batteries of other models or decorative parts.