




English STEM Game Booth Overview 19/20

Game	Scientific Theory	Game Rules
<p>1. Magic Mirrors</p> 	<ul style="list-style-type: none"> ➤ Mirrors have reflecting properties ➤ Use two mirrors to create different sizes of angles ➤ Observe the quantity of images being generated ➤ Because of the different number of reflections, the number of images will vary ➤ The smaller the angles, the more images will be created. ➤ (Number of images = $360^\circ \div \text{angles} - 1$) ➤ Infinite images will be produced if the mirrors are in a ring-shaped combination 	<ul style="list-style-type: none"> ✧ Use two mirrors to create different angles. ✧ Observe the quantity of images being generated.
<p>2. Balloon Power</p> 	<ul style="list-style-type: none"> ➤ The inflated balloon lowers the pressure in the plastic cups ➤ The outside air pressure is bigger than that inside the plastic cups, so the cups can be sucked onto the surface of the balloon 	<ul style="list-style-type: none"> ✧ Every balloon has a word category (colours, animals, food & drink items, adjectives and action words) written on it. ✧ Each cup is labelled in the above category. ✧ Match one balloon with four plastic cups according to its word category. ✧ Inflate the balloon. ✧ Let the plastic cups be sucked onto the surface of the balloon. Then inflate it again. ✧ Use the inflated balloon to lift objects.

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<p>3. Paper Pieces Trick</p> 	<ul style="list-style-type: none"> ➤ The plastic ruler acts as a kind of Insulators ➤ It is charged after being rubbed against clothes ➤ Electrons transfer from clothes to the ruler, leaving the ruler with a negative charge ➤ The static charge on the ruler induces polarisation in the paper pieces, and thus attracts them 	<ul style="list-style-type: none"> ➤ Put the game materials on the table. ➤ Ss choose three things from the basket and answer the question, 'What is it?' with 'This is a/an _____.' ➤ Then rub the chosen things against hair or clothes and move them close to the paper pieces one by one. ➤ Observe them to see if they attract the paper pieces.