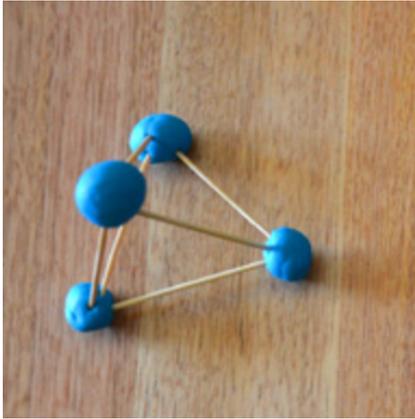
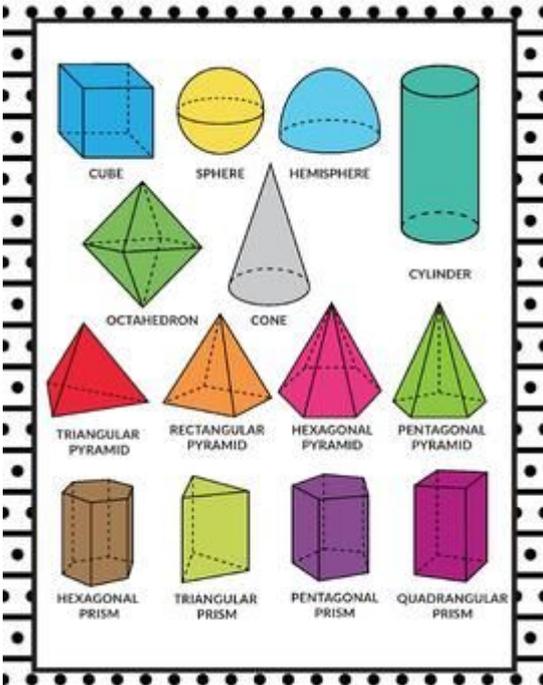


3D SHAPES

Level	3 (Age group 11-14)
Resources Required	20 Matchsticks or twigs per player Playdough Notecard with names of 3D shapes
Alternate Options for the Resources	<p>Adults can make playdough by mixing the ingredients below in the following ratios:</p> <ol style="list-style-type: none"> 1. 2 cups flour 2. $\frac{3}{4}$ cup salt 3. 2 cups lukewarm water 4. 2 tablespoons of vegetable oil <p>Players can make 6 notecards each with a 3D shape drawn on a piece of paper the size of their palm. They can choose any 6 from the following 3D shapes to draw:</p> <ol style="list-style-type: none"> 1. Cuboid/rectangular prism 2. Cube 3. Triangular base pyramid 4. Square base pyramid 5. Pentagonal prism 6. Hexagonal prism 7. triangular prism 8. pentagonal prism
Strand Covered	Shape and Measurements
Targeted Skills	Building 3D shapes
inspired by	Childhood 101
Time Required	15 minutes for the game 15 minutes to make the playdough
Previous Learning Required	3D shapes properties
Support Required	Medium support

Rules of the Game:

Goal	The player that completes their cards first and builds their shapes first, wins
Rules	Once a player picks 4 cards, they are not allowed to swap it out
Steps	<p>Step 1: Shuffle all the cards that were made together and place it in the middle of the players, face down</p> <p>Step 2: Give a palm-sized ball of playdough to each player</p>

	<p>Step 3: Each player draws 4 cards each from the pile</p> <p>Step 4: The player makes the 4 shapes listed on their cards by using small spheres of playdough as vertices and the matchsticks as edges (see reference image below)</p> <p>Step 5: The first player to make all their shapes wins</p>
<p>Images or Illustrations</p>	<p>Example of a complete 3D square based pyramid:</p>  
<p>Variations of the Game</p>	<p>Instead of making the shape, the players can draw the shape on paper and list the features. For example, draw a cube and list 8 vertices and 12 edges</p>
<p>Enrichment</p>	<p>The game can also be played to test angles. For example, using sticks to show right angles, obtuse angles and acute angles.</p>
<p>Simplification</p>	<p>The game can be played for 2D shapes instead of 3D shapes.</p>

	<p>The players can draw 2-3 cards instead of 4.</p> <p>The players can group into groups of 2 instead of playing the game individually</p>
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