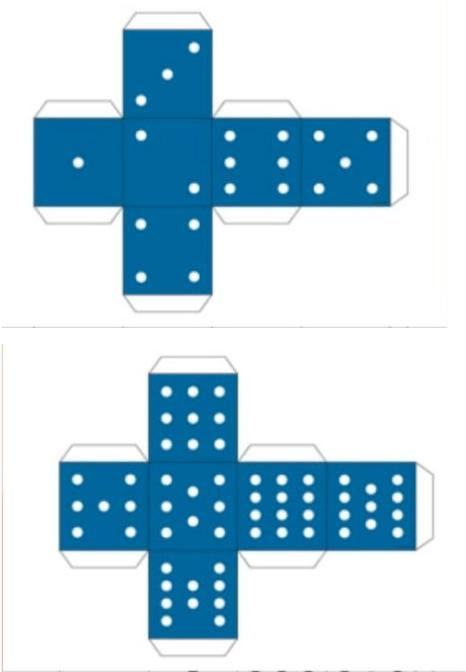


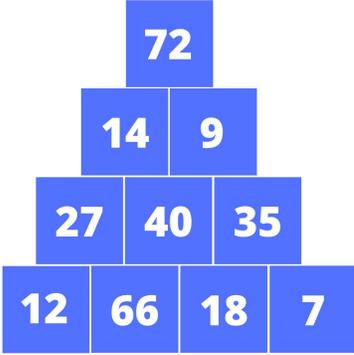
TRIANGLE TOWER

Level	2 (Age group 8 – 10)
Resources Required	Two dice, papers, counters
Alternate Options for the Resources	To make the dice follow the steps below: <ol style="list-style-type: none"> 1. Draw and cut out the net of a cube by following the template in the images section below. Draw 4 squares horizontally and draw one square above and below the second horizontal square. 2. On each square face draw dots representing a unique number from 1-6 (no number should be repeated). Fold the net so that all the numbers are facing outwards 3. Use glue or any adhesive to stick the edges of the cube together 4. Repeat so a total of 2 dice are made, one with numbers from 1-6, the other from 7-12 as shown in the images section below.
Strand Covered	Numbers and Operations
Targeted Skills	Multiplication
Inspired by	Third Space Learning - Emma Johnson
Time Required	15 minutes for the game 20 minutes for preparation
Previous Learning Required	Numbers from 1-72 Count in multiples of 6, 7, 8, 9, 11,12
Support Required	Medium supervision

Rules of the Game:

Goal	Cover all 10 squares of the triangle tower
Rules	Players must throw the 2 dice together
Steps	<p>Step 1: Cut out 31 squares from a piece of paper (Use your palm to roughly measure the size of each square). Then write a different number on each of the 31 squares from the following numbers: 7,8,9,10,11,12,14,16,18,20,22,24,21,27,30,33,36,28,32,40,44,48,35,45,50,55,60,42,54,66,72.</p> <p>These are all of the possible answers you can get upon multiplying the numbers on the dice together.</p> <p>Note: Each player will require their own separate set of these 31 squares.</p> <p>Step 2: Ask each player to choose 10 random squares from their set of 31 squares and arrange them to form a triangle tower, with four squares on the</p>

	<p>bottom up to one square at the top. (See the images/illustrations section to see the arrangement).</p> <p>Step 3: Once all players have set up their triangle tower, ask players to take turns to roll their two dice and multiply whichever two numbers they get. Upon multiplying, if they get a number that is written on one of the squares used to make their tower, they should cover it with a counter/cross out the number with a pencil after checking that their answer is right.</p> <p>Step 4: The winner is the first player who covers all the numbered squares in his/her tower.</p>
<p>Images or Illustrations</p>	<p>Dice Templates for 1-6 and 7-12:</p>  <p>Triangle Tower example:</p>

	
Variations of the Game	<p>The game can include more challenging multiplication calculations by writing bigger numbers on both of the dice. For example, both dice can be numbered from 7-12.</p> <p>The game can be played with a bigger triangle tower.</p>
Enrichment	<ol style="list-style-type: none"> 1. Division 2. Players are able to choose which operations they want to use. 3. More than 2 dice are used at a time.
Simplification	<p>The game can be played with operations like addition or subtraction to make it less challenging</p>