
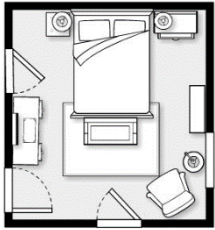

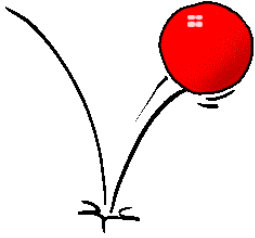
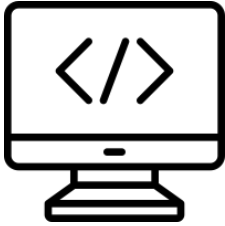
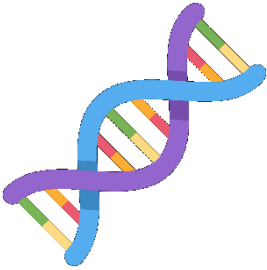
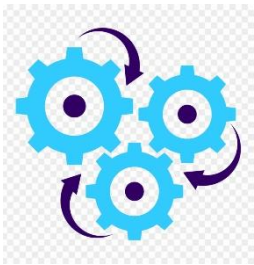
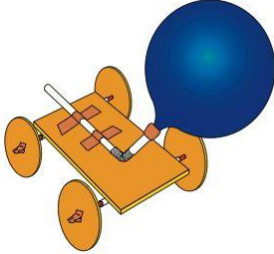
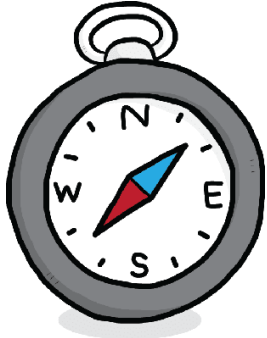


STEM BINGO

The summer can be a great time for students on holiday to continue learning and exploring new and interesting topics! Challenge your future Engineer to complete this STEM Bingo game which includes virtual activities and lessons, and fun, hands-on at-home experiments.

<p>1. SOUNDPROOF BOX</p> 	<p>2. MAP MY ROOM</p> 	<p>3. DON'T FORGET THE SUNSCREEN</p> 
<p>4. BOUNCING OFF THE WALLS</p> 	<p>5. CODING WHIZ</p> 	<p>6. DNA INVESTIGATION</p> 
<p>7. GIZMOS AND GADGETS</p> 	<p>8. BUILD A BETTER BALLOON CAR</p> 	<p>9. DIY COMPASS</p> 

1. SOUNDPROOF BOX

Learn how sound travels and how to dampen it from these sites ([here](#) and [here](#)) and put your knowledge to the test to design a “soundproof” box with household materials. Test your design by seeing how loudly you can hear music playing from a phone or small cordless radio placed within the box.

2. MAP MY ROOM

Using a measuring tape, measure every wall in your room, including dimensions of all furniture. Re-draw your room and furniture using a ruler. Make your drawing to scale by drawing 4cm on your page for every 1m that you measured in real life. Once you are done drawing by hand, try to re-create your room in 3-D using SketchUp, which can be downloaded for free [here](#).

3. DON'T FORGET THE SUNSCREEN!

Learn [here](#) about how sunburns happen and how sunscreen can help prevent painful and dangerous burns from ruining beach days. See how effective your household sunscreen is with a simple experiment. Write your name or draw a picture on a black piece of paper. Leave the page outside in the sun for several hours. After this, wipe off the sunscreen to see how the sunscreen protected the page from fading.

4. BOUNCING OFF THE WALLS

Learn [here](#) about how polymers are formed and use the directions [here](#) to make simple three-ingredient bouncy balls. Experiment with your recipe to see if you can make it even bouncier!

5. CODING WHIZ

Try your hand at learning coding skills with the fun block and text-based coding games at [Tynker](#).

6. DNA INVESTIGATION

Learn about DNA and Genetic Counseling through [this virtual activity](#) where you can help a couple to determine if they carry a genetic mutation for a disease.

7. GIZMOS AND GADGETS

Use the resources from [this site](#) to learn about simple machines then put your knowledge into action with [this interactive game](#).

8. BUILD A BETTER BALLOON CAR

Learn about Newton’s Third Law [here](#) and use this knowledge to [build a balloon car](#). Design your car base to move as quickly as possible when air is let out of the balloon. Have a race between a few different models and compete for speed and maximum distance.

9. DIY COMPASS

Get ready for a summer of exploration and navigation with your own homemade compass! Get a background on how magnetic fields work and the important role they play in the function of a compass [here](#) and get the directions to make your own compass [here](#).