

JENGA SCIENCE

Jenga isn't just a fun game. It's also a great way to learn about center of gravity! Just like with your body, Jenga towers (or even real-life buildings) have a **center of gravity**, where the weight is even on all sides. Something with a **strong, low** center of gravity is **more stable and less likely to fall over**. That's why the taller you build a Jenga tower, the harder it is to stop it from falling—you are making the center of gravity higher!



An architect designed and proposed this "Jenga" building for Vancouver. He designed it this way to make the most of the nice views on each level. Would you want to live in a building like this?



BUILD YOUR OWN JENGA TOWER!

Try building different structures with Jenga blocks (or any other wooden blocks you might have at home). Make different shapes and heights to change the **center of gravity**. See how high you can build a tower without it falling down!

Spinning Tops and Trapeze Artists

At first, you might not think spinning tops and trapeze artists have much in common, but **physics**, or the **science of motion**, connects them both!

What makes a top spin?

When you twirl a top, it **rotates** in a circle around an invisible line, or **axis**, and this is called **angular momentum**. Angular momentum is what makes the top spin! The more **momentum** a top has, the longer it will spin. For example, if a top is **larger**, or if you spin it **faster**, it will take longer to fall down. **Try spinning the tops here to see how long they'll stay balanced!**



What about flying trapeze artists?

Many flying trapeze artists **flip**, **twist**, or **spin** in the air to complete amazing feats once they let go of the bar.

This helps build **angular momentum** so they can fly higher and farther! And if a trapeze artists **weighs more**, they have even more **momentum**—so not all trapeze artists have to be small and light!

