

Science is based on claims supported by evidence. When those claims are proven to be true time and time again, they become what is known as a scientific law.

Here are a few examples of laws that you might already know.

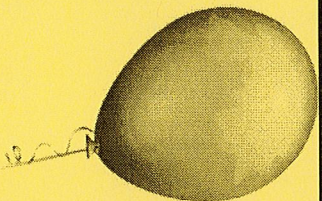


If the dog releases this ball, the ball would **fall to the ground**

We know this is true because of the **law of gravity**.

You put the TV remote on the table while you go refill your glass. You expect that remote to be there when you return.

Thanks to the **laws of motion**, we know that objects do not move unless they are acted on by an outside **force**. So while we can sometimes feel like the remote has “walked away”, it has always been dropped, nudged, buried, or misplaced instead.



If someone were to keep pumping this balloon up with air, eventually it would **pop**. We know this (partly from previous experience) and from laws we know about **elasticity**.

If you set a hot cup of cocoa on the table, left, and returned 20 minutes later... what would you expect to happen? (*Respond in the space below*)

The hot cocoa will cool down since the

surrounding air is cooler than the hot cocoa

This idea, that **energy** flows from things at a **high** temperature to things with a **low** temperature is a scientific law.

