

# FROM PLASTIC BOTTLE TO PROTOTYPE LEGO® BRICK

We have tested more than 250 different variations of PET plastic and developed a prototype solution using recycled bottles. It's a patent-pending material that increases the strength and durability of the recycled plastic.

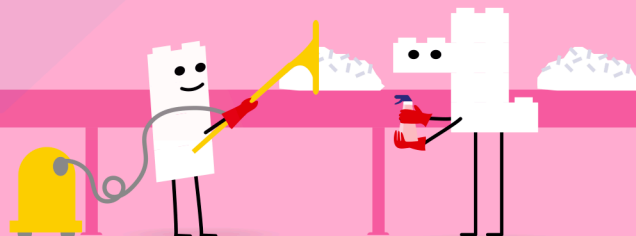
This is just one milestone on the journey to making our products from sustainable sources.

Here's how we turn a plastic bottle into a prototype LEGO® brick...

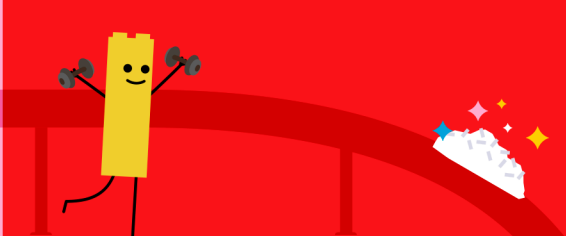
1. Our partners source drinking bottles made from PET plastic. These raw materials are ground down into flakes



2. The PET flakes are cleaned to ensure safety and purity and then granulated



3. The cleaned granulate undergoes an innovative process to strengthen the recycled PET and make it suitable for LEGO products



6. As with all LEGO bricks, the prototype bricks are further checked for safety, durability, and playability in our quality testing labs

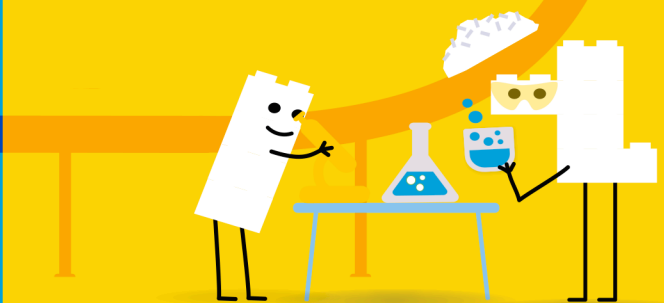
one plastic bottle can make ten of our 2x4 LEGO bricks!



5. Once the team is confident that the material has the right properties, we mold bricks and test them on quality and performance. If they don't meet our standards, we go back to step 3



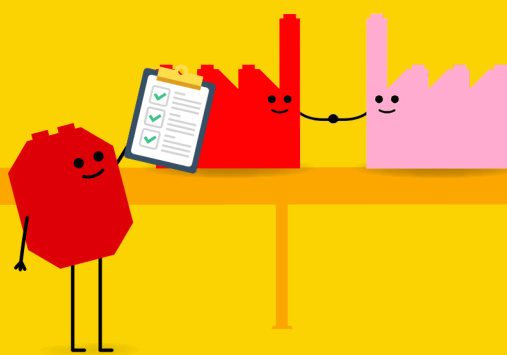
4. The granulate is molded into test specimens that are evaluated for their mechanical properties



7. The testing is far from complete. Among other things, we now need to find out how the material can be colored



8. Once all necessary tests of the bricks check out, we start analyzing the production setup needed to manufacture bricks using the new material



9. If all goes well you might one day find a brick made from recycled PET in your LEGO sets!

