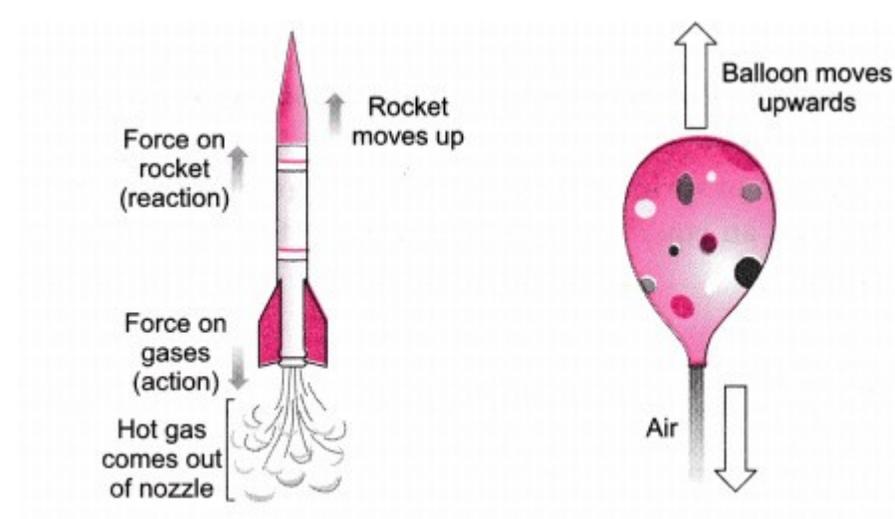


Hi everyone!

We hope you enjoyed last week's LEGO heart build and were able to learn a thing or two about the most important muscle in your body. Today we'll be building and talking about one of our favorite subjects, rockets!

What is a rocket? A rocket is a cylinder-shaped missile, spacecraft, or other aircraft that gains **thrust** from burning gases shooting out of it.

So, what is thrust? Thrust is a force that pushes. Newton's Third Law of Motion says that "For every action there is an equal and opposite reaction". What does that mean? Have you ever blown up a balloon and then let it go? What happened? The balloon flew away right? The air escaping pushed the balloon away making it fly. That's sort of like what happens in a rocket, except that a rocket uses a fuel that is burned to make it move.



Did you know?

- People have been experimenting with simple rockets (like fireworks) for a long time! 800 years ago, the Chinese started experimenting with gunpowder powered rockets.
- Before sending humans to space, scientists sent dogs and monkeys (and they even wore spacesuits designed just for them!) Do you think they brought biscuits and bananas with them?
- In April 1961, the first human used a giant rocket to journey into outer space. He circled the Earth for 108 minutes without getting dizzy!
- It takes a rocket only 8 minutes to accelerate to a speed of 15,000 miles per hour / 24,000 kilometers per hour.
- In order to burst through the gravity of Earth, a rocket must travel at speeds of 7 miles per second / 11 kilometers per second.

- The largest and most powerful rocket ever built was the Saturn V rocket. It was 363 feet tall (about 60 feet taller than the Statue of Liberty!), weighed 6.2 million pounds, and was able to get American astronauts including Neil Armstrong and Buzz Aldrin to the moon.
- A company called SpaceX made a rocket called Falcon Heavy that is almost as powerful as Saturn V, and in February 2018 it carried a car into space!



Want to learn more about rockets, Saturn V, and Falcon Heavy? Here's a brief video that shows you more:

https://www.youtube.com/watch?v=mD1_UdW4qqQ

(Parents: You are welcome to review the video for your child first)

We know you all have wonderful imaginations and would love to see your creation! Please post it and share with us!

Until next week!

Bricks 4 Kidz Camarillo and Thousand Oaks