

FORCE



THE FORCE is all around us! Well... forces are all around us anyways!

A force is a push or a pull. When we use enough force in the right ways we can move objects and ourselves!!

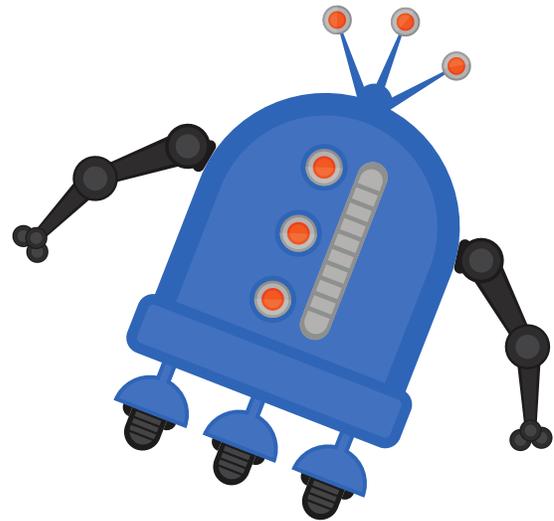
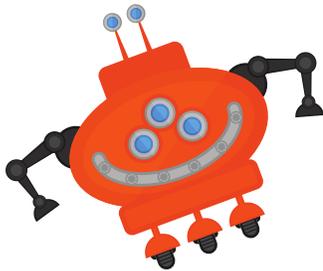
THINK ABOUT THE THINGS YOU'VE DONE ALREADY TODAY AND HOW YOU MAY HAVE USED FORCE.

Did you walk or run?

Did you pick up any toys?

Did you bounce or kick a ball?

Did you eat or drink anything?



YOU USED FORCE TO DO ALL OF THOSE THINGS!

When you walked you used force to push off the ground

When you picked up the toy you pulled it up off the ground

When you kicked the ball you pushed with your foot

When you ate breakfast you pushed your teeth together to mash up the food and you pulled your tongue to swallow it all down!

**MAYBE YOU NEVER REALIZED IT
BUT THE FORCE IS EVERYWHERE!**



FORCE



DID YOU KNOW YOU USE FORCE WHEN YOU SWIM? LET'S TRY IT!

Lie on your belly near the bottom of your bed with your head facing your pillow and one arm hanging off the side of the bed

Practice swimming freestyle with that hanging arm

Did you move any closer to your pillow?

Why not? What was missing?

Your arm was moving but there was nothing to push or pull against... nothing to apply force to!

Now ask a sibling or a parent to lie on the floor on their back near your bed
Have them wave their hands near the edge of your bed like water

Try swimming freestyle again!

What will you have to do to the "water" to move yourself?

-Still haven't moved? Ask your "water" to slow down. Grab your parent or siblings hand and pull yourself forward towards the pillow.

You can try the same thing lying on your back and swimming backstroke with one arm.
Pull against the water to move yourself closer to the pillow

Now try pushing against your parents or siblings hand.

What happened? Did you move forward or backwards?

That's the same thing that happens when you swim in the pool! The way you use force on the water by pushing or pulling determines which direction you move!

WHO KNEW YOU WERE SUCH A SWIMMING JEDI?!





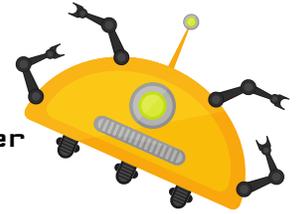
FORCE



LET'S TRY PLAYING WITH FORCE A LITTLE BIT MORE!

Build yourself your own BB-8 droid using a pingpong ball, aluminum foil, a pool noodle, playdough, or anything else you have around the house... things that float work best!

Now get a bowl of water or fill the bathtub and put your droid in!



Try using force to move your droid from one side of the tub to the other

Push it with your hand

Pull it with a string

Push and pull the water around the droid: on the sides, in front and in back

Does the droid move towards you or away from you when you push the water from behind? What about if you pull from behind?

What other ways could you use force to move the droid?



**YOU NEED TO USE FORCE TO MOVE IN THE WATER.
THINK ABOUT HOW USING FORCE HELPS YOU SWIM.**

How do you use force with your arms?

How do you use force with your legs?

Do you use force in different ways for different strokes?

WE CANT WAIT TO GET BACK TO THE POOL BUT FOR NOW...

**MAY THE FORCE
BE WITH YOU**