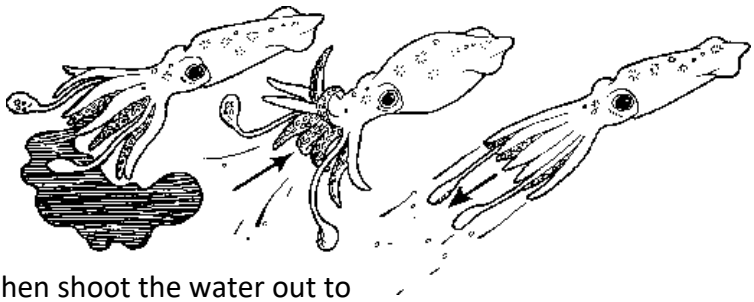
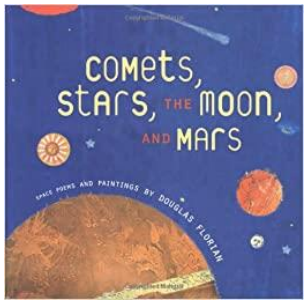
The POWER of PROPULSION (3-5)

The SCIENCE of JET PROPULSION:



Kinetic energy – the energy of motion
Potential energy – stored energy
Propulsion – the act of driving or pushing in one direction
Squid use jet propulsion to move *backwards*!
They draw water into the body (mantle) and then shoot the water out to swim away from a predator.

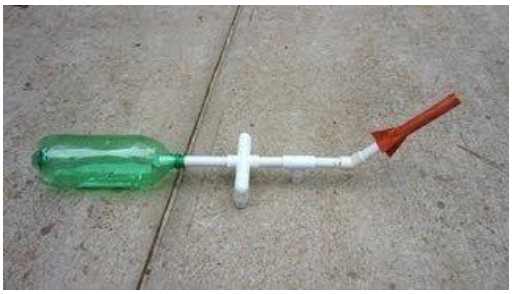
LITERACY CONNECTION:



Comets, Stars the Moon, and Mars by Douglas Florian will take you on a journey through our galaxy. Don't have the book at home? Go online and enjoy a read aloud.

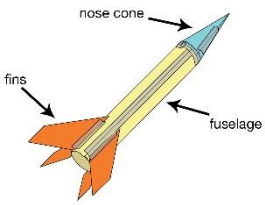
ACTIVITY: STOMP ROCKET

Materials: paper, tape, scissors, empty plastic bottle (any size), ½ inch PVC pipes, caps and joints OR rubber tubing – whatever you have!



LAUNCHER INSTRUCTIONS

1. Assemble the pieces of PVC to make a "t" shape.
2. Keep one end open for the bottle, and the other end open for the rocket.
3. Put caps over the side arms (this keeps air from escaping!)



ROCKET INSTRUCTIONS

1. Role a tube of paper around the pipe and tape it (loose is better).
2. Cut a semi-circle out of paper and make a cone to go on top of your rocket. Tape it in place.
   TIP: It is easier to make the top of your rocket flat instead of pointed.
3. Cut out triangles to make 'fins' and decorate your rocket (optional)

What is happening? The air in the bottle is "fuel" for the rocket. Stomping on the bottle forces the air through the launcher and pushes the rocket up! The bigger the bottle, the more "fuel."

EXPLORE: Turn the end of the launcher to aim for a target (a bucket or maybe a friend who wants to catch the rocket).

For step-by-step instructions, watch the video at: Stomp Rocket STEM Activity

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program.
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Having fun? Send pictures or video links of you and your Stories & STEM projects to **csharkey@literacypbc.org**