

## Year 4 Rocket Science - The Forces of Flight student worksheet

With Street Science, you became a junior rocket scientist, and used **Newton's**Laws of Motion to propel a rocket into the sky!

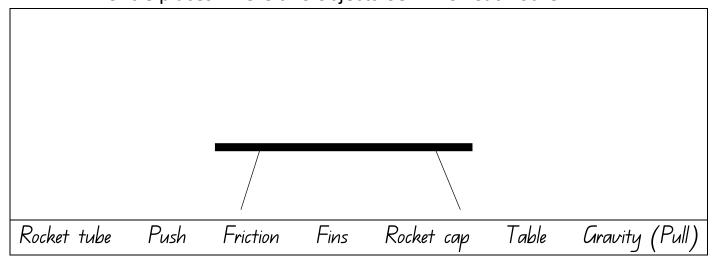
1.	Use the word bank to complete the following sentences about Newton's First Law of Motion						
	stop	in motion	at rest	start	object	force	
	Newton's First Law of Motion says that an remain until a force is applied to it.					_ at rest	wil
	— — It also says						
	until a						
	This means that pushing and pulling forces are used to $\_\_\_\_$						
	movement.						
<ol> <li>Using Newton's law, draw how you would apply a force to make it move (be in motion) or stop moving (be at re show these forces.</li> </ol>							
	Force th	nis ball into <b>m</b> e	otion	Force	this ball	to <b>rest</b>	

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List any other objects which come into contact with these balls:



- 3. Draw and label your rocket flying off the launch table.
  - Include all the labels to show objects and forces
  - Use ARROWS to show the direction of forces
  - Circle places where two objects CONTACT each other



- 4. Contact and non-contact forces occurred between your rocket and other objects such as the table, air and Earth.
- a) Describe how a **contact force** affected your rocket

b) Describe how a **non-contact force** affected your rocket

## **Extras for Experts!**

Forces affect every part of our day. Take a walk around your school and see how many forces you and your classmates can describe. Decide if they are contact or non contact (HINT: some objects involved in contact forces cannot be seen!)