

# Blast Off!

## Creative Expression



### What You Will Discover

Pick up some basic principles about rocketry and test out your own designs and ideas!

### The Adventure

Design and build your own rocket using household supplies. Find out how different fuels and designs will affect how your rocket flies. Then, test your rockets to see how they do!



DISCOVER



MEETING

9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**NSERC  
CRSNG**



It starts with Scouts.

## Plan

- What supplies will you need for your rocket?
- How will you create thrust to launch your rocket? A reaction? Pressure?
- Where can you safely launch your rockets?

## Do

**#ScoutsDoStuff:** 3-2-1 BLAST OFF! Take photos or videos of your rocket launches to share, or invite another Section to come and watch your launch.

## Review

- Did your rocket fly how you expected it to? Why or why not?
- What designs worked best? What fuels worked best? How well did what happened match your expectations?
- How do real rockets fly?

## Safety Note

- How can you stay safe while working on your rocket? What safety equipment do you need?
- What safety precautions do you need to take when launching your rocket?

## Try this

### Keep it Simple

Why not start with something smaller than bottle rockets? Try making your rocket out of a film canister or YOP bottle—use baking soda and vinegar, or an Alka-Seltzer® tablet and water to create thrust.

### Take it Further

Is there a local model rocket club in your community or someone else who could come and teach your Section about model rockets? Why not find out how they work and how to determine what charge to put in each rocket? Learn from the experts!

