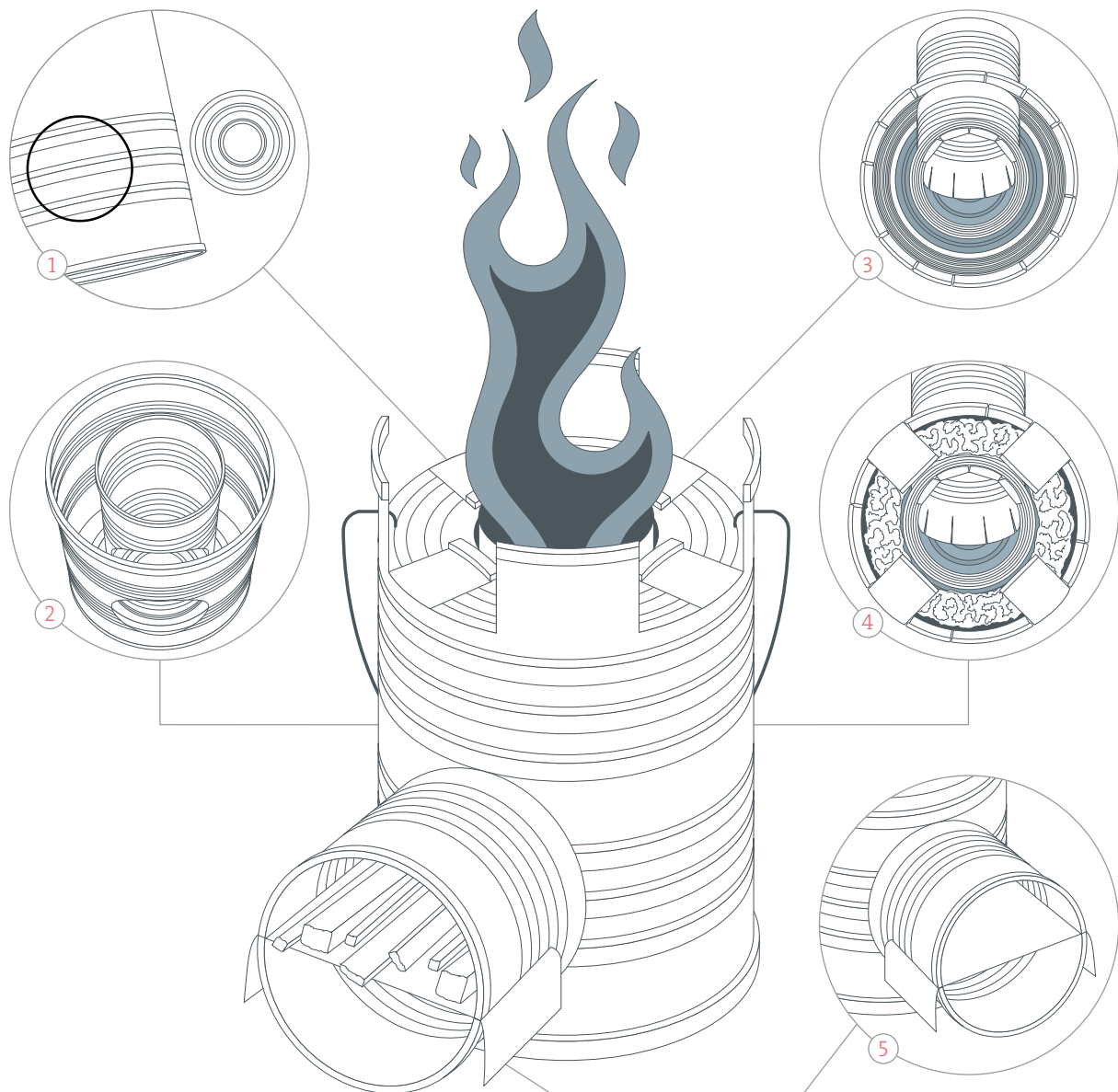


# BUILD A TIN-CAN ROCKET STOVE

Combining three all-time favourite Scouting activities – building, cooking and firelighting

SUITABLE FOR CUBS, SCOUTS AND EXPLORERS



**1** Ask a young person to draw a circle on the side of the large can, around 1cm from the base, using a medium tin can as a template. Use your metal cutters to cut this circle out. You could also use a mini-saw if you have access to one, but make sure you use protective eyewear and gloves.

**2** Ask another young person to use the cut-out section of the large can as a template – being mindful of the sharp edges – and draw a circle on a medium can. Cut this out. Place the medium can in the centre of the large can, lining up the holes.

**3** With adult help, get another young person to cut off the rim around the top of a second medium can, before cutting down from the top at regular intervals to create 1.5cm-long tabs. Give one of your young people some protective gloves before asking them to carefully bend the tabs inwards and inserting the can through the holes in both of the other cans. Once inserted, the tabs can be bent upwards to fix the tin in place.

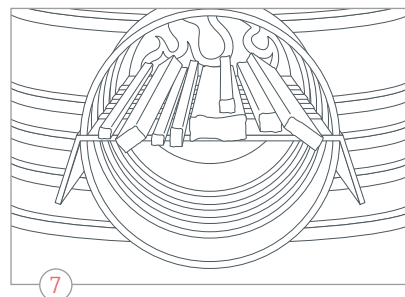
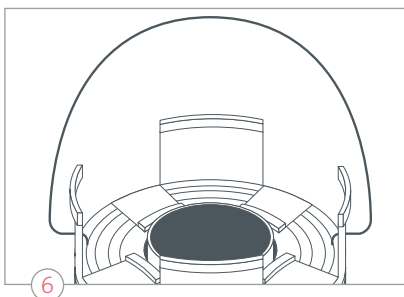
**4** Next, ask them to trace another circle in the middle of the lid of the large can. Cut it out to create a metal ring. Between them, they should cut around eight tabs into the top of the large can. The space in-between the large and medium cans can be filled with insulation and the metal ring should be placed on

top. Ask two young people to hammer down four of the eight tabs to hold the metal ring in place. When choosing which tabs to hammer down, make sure one is left on either side of the stove for the handle to be fixed to.

**5** To make a shelf for the stove, ask a young person to measure the width of the third medium can before removing the base and cutting down one side. It can then be beaten flat and a rectangle can be marked out at the same width at the tin can, but with two flaps at one end. Ask another young person to make two parallel cuts in the mouth of the stove, the same depth as the flaps, then insert the shelf and fold down the flaps.

**6** To make a handle, ask a young person to straighten out a wire coat hanger and bend it into an arc. Pierce or drill a hole through two of the tabs, thread the ends of the hanger through and bend with pliers to secure.

**7** The stove is ready to use! You can paint it with high-heat spray paint if you want a smart finish. If not, build a fire by putting small pieces of coal and shredded newspaper in the centre and long, thin pieces of wood or kindling on the shelf so that it reaches the flames. Keep feeding the stove and make sure that anyone who handles the stove is wearing heatproof gloves.



## TIME NEEDED

**90** minutes

## EQUIPMENT NEEDED

- Marker pen
- Large tin can with lid (2.5/3kg) from school kitchens or caterers
- Medium tin cans (800g) x 3
- Protective gloves
- Metal cutters and hammer
- Insulation (eg sand, clay, foam)
- Wire coat hanger
- Pliers
- Drill or Swiss Army Knife
- High-heat spray paint (optional)
- Heatproof gloves
- Coal, newspaper, kindling etc

## THIS ACTIVITY LINKS WITH THE FOLLOWING BADGES



Cub Backwoods  
Cooking Activity  
Badge



Cub Our  
Outdoors Challenge  
Award



Scout Outdoor  
Challenge Award



Scout Camper  
Activity Badge

## OUTCOMES

Your young people will love working as a team to create this portable stove, while at the same time learning how to use tools responsibly and safely.

## DOWNLOAD THIS PAGE

Find this and other great activities at [scouts.org.uk/magazine](http://scouts.org.uk/magazine).