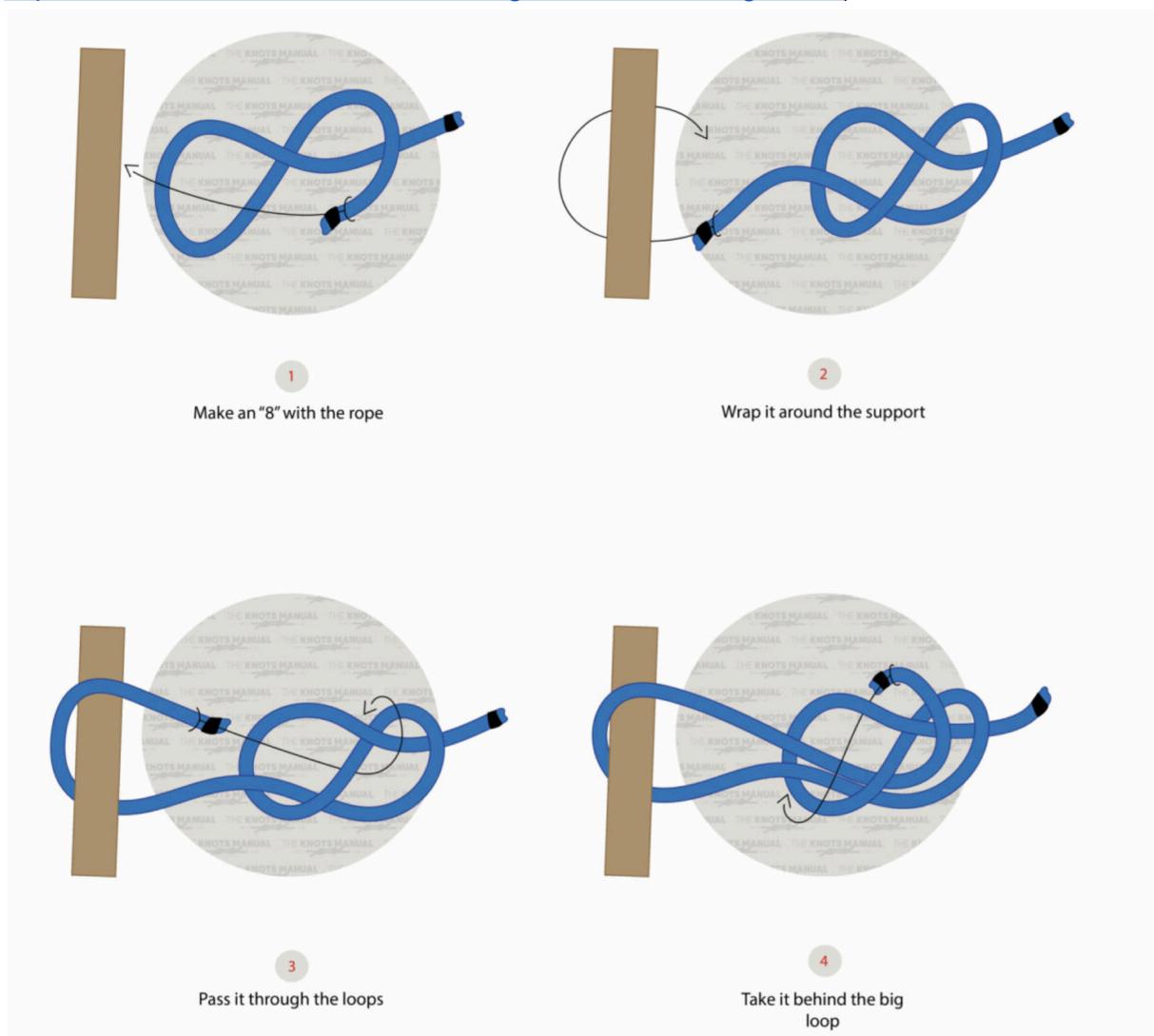
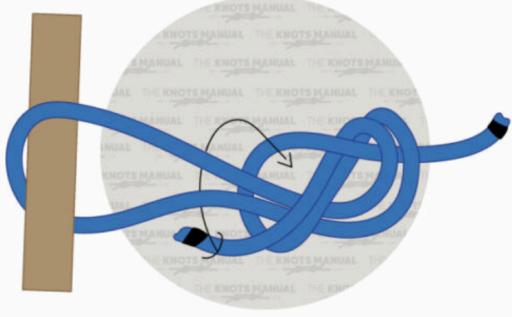


Making a rocket / Faire une fusée

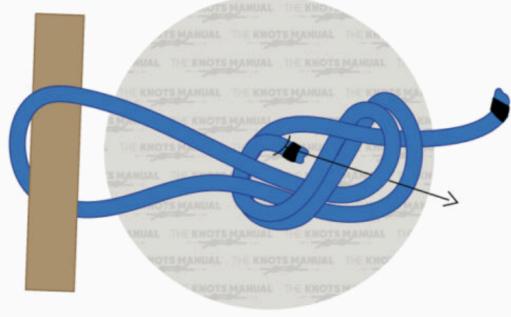
1. Take 1 rocket body tube, 1 motor mount and 1 cord
Prennez 1 tube de fusée, 1 supporter de moteur et 1 corde
2. Tie a loop in the cord, $\frac{1}{3}$ along the length
Attachez une boucle dans le cordon, $\frac{1}{3}$ sur la longueur
3. Tie the long end of the cord to the two small holes in the motor mount using a figure of 8 knot (see pictures)
<https://www.theknotsmanual.com/knots/figure-8-follow-through-knot/>
Attachez la longue extrémité du cordon aux deux petits trous dans le support moteur en utilisant un nœud de 8 (voir images)
<https://www.theknotsmanual.com/knots/figure-8-follow-through-knot/>





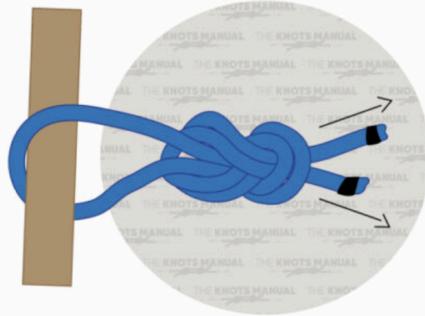
5

Pass it next to the upper line



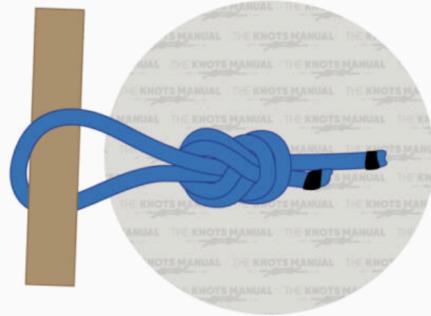
6

Take it out parallel to the standing part



7

Pull ends to tighten



8

The finished knot forms a loop



4. Place the motor mount into the rocket body tube, cord end first, threading the cord through the tube and out the other end

Placez le support moteur dans le tube du fusée, l'extrémité de la corde en premier, enfilez la corde à travers le tube et retirez l'autre extrémité



5. Take one nose cone. Tie the other end of the cord to the two small holes in the nose cone using a figure of 8 knot

Prennez 1 cône de nez. Attachez l'autre extrémité de la corde aux deux petits trous dans le cône de nez en utilisant un nœud de 8



6. Take one parachute. Tie the end of the parachute lines to the loop already made in the cord

Prennez un parachute. Attachez l'extrémité des lignes de parachute à la boucle déjà faite dans la corde

7. Fold the parachute, wrap the cord around it and place it inside the rocket body tube. Fit the nose cone into the end of the rocket body tube

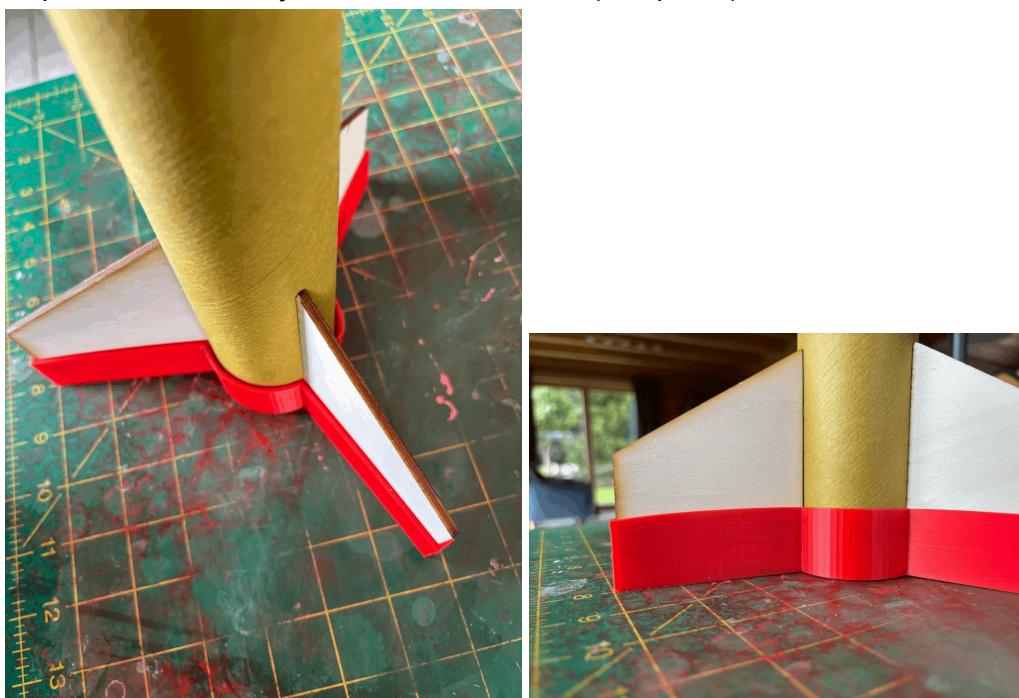
Pliez le parachute, enroulez la corde autour et placez-le à l'intérieur du tube de fusée. Insérez le cône de nez dans l'extrémité du tube du corps de fusée.

8. Glue the non-cord end of the motor mount into the end of the rocket body tube, so that the end of the motor tube is aligned with the end of the cardboard tube. Use PVA glue and wait for the glue to partially dry (15 minutes)

Collez l'extrémité non cordée du support moteur dans l'extrémité du tube de fusée, afin que l'extrémité du tube moteur soit alignée avec l'extrémité du tube en carton. Utilisez de la colle PVA et attendez que la colle sèche partiellement (15 minutes)

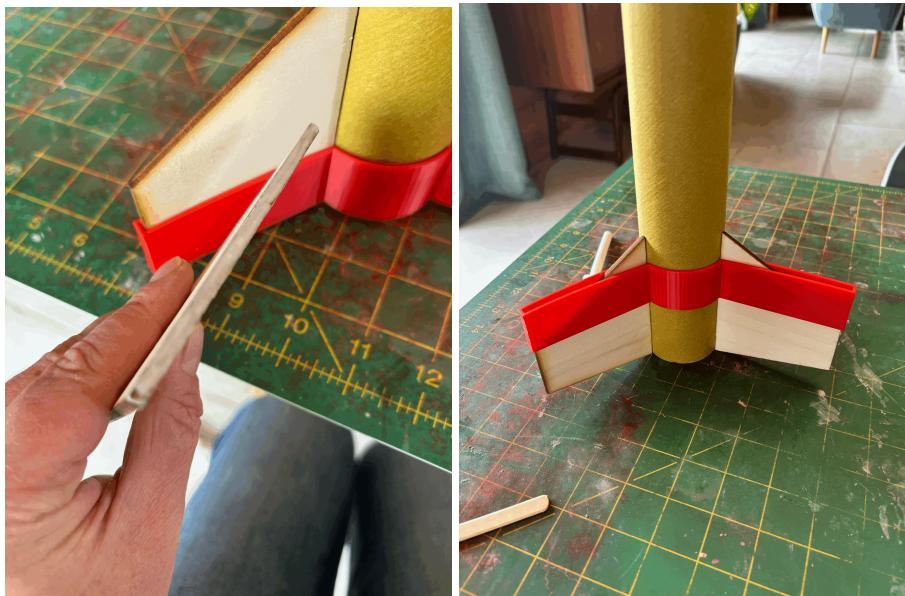


9. Take three fins and one fin guide. Place the fin guide around the rocket body tube and dry fit the fins to the same end as the motor support (see picture)
Prenez trois ailettes et un guide d'ailette. Placez le guide d'ailette autour du tube du corps de la fusée et ajustez à sec les ailettes (voir photo)



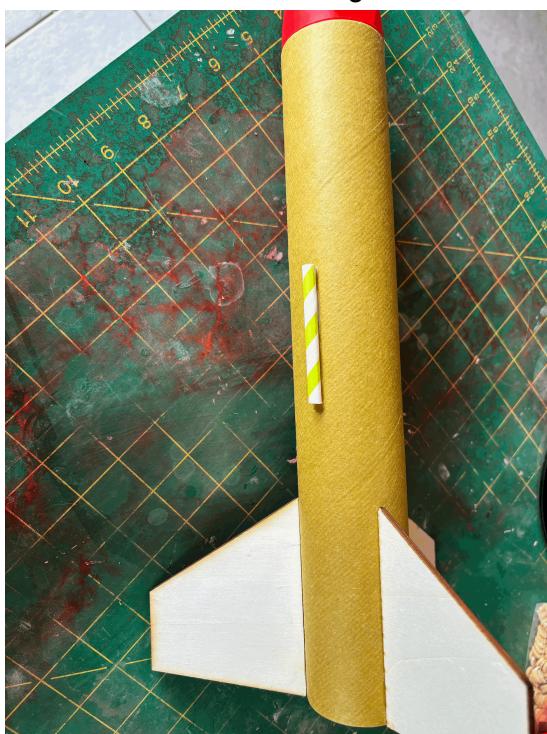
10. Glue each fin to the rocket body tube, the end of the shallow sloping side lined up with the end of the rocket body tube (see picture). Use the fin guide to ensure the fins remain in place whilst the glue dries

Collez chaque ailette sur le tube de fusée, l'extrémité du côté peu incliné aligné avec l'extrémité du tube du corps de la fusée (voir photo). Utilisez le guide d'ailettes pour vous assurer que les ailettes restent en place pendant que la colle sèche.



11. Take one launch lug (piece of drinking straw) and glue it between two fins, halfway along the rocket body tube

Prenez une cosse de lancement (morceau de paille à boire) et collez-la entre deux ailettes, à mi-chemin le long du tube du corps de fusée



12. Voila! You have a finished rocket
Voilà! Vous avez une fusée finie

Flying a rocket

Motors

Recommended: Klima D9-3 (18mm diameter) Source: [Hobbyshop.ch](#)

Notes:

- D9-3 provides good altitude (150m) with 3-second delay for recovery deployment
- Always verify motor fits properly before flight
- Store motors in cool, dry location

Recovery Wadding

Purpose: Protects parachute from hot ejection gases Source: [Hobbyshop.ch](#)

Usage: Pack wadding loosely into body tube below parachute before each flight

Launch Equipment

Launch Rod

Specification: 5mm diameter metal rod, minimum 1m length Purpose: Guides rocket during initial acceleration until fins provide stability

Safety Equipment

Fire blanket: Protects ground from motor flames Safety distance: Minimum 30m from spectators Recovery area: Large open field, minimum 200m radius

Assembly Instructions

1. Prepare body tube: Remove plastic end caps, sand lightly if needed for 3D printed parts fit
2. Install motor mount: Press-fit motor mount into body tube, ensure shock cord attachment is accessible
3. Attach fins: Use fin guide to mark positions, epoxy fins to body tube with 90° spacing
4. Install nose cone: Test fit, ensure smooth separation for recovery
5. Prepare recovery system: Tie kevlar cord to motor mount, attach parachute with swivel if available

Pre-Flight Checklist

- Motor properly installed and retained
- Recovery wadding packed above parachute
- Parachute properly folded and not tangled
- Fin attachment secure
- Launch rod guide (straw) attached

Safety Notes

 Important Safety Information:

- Always follow local regulations for model rockets
- Never attempt to make your own motors
- Inspect all components before each flight
- Maintain safe distances during launch
- Recovery area must be clear of dry vegetation
- Do not fly in high wind conditions (>20 km/h)

First time building rockets? Consider joining ARGOS a local rocketry club. The experience and mentorship are invaluable for safe, successful flights.