

## Introduction Page

### Propeller Launcher

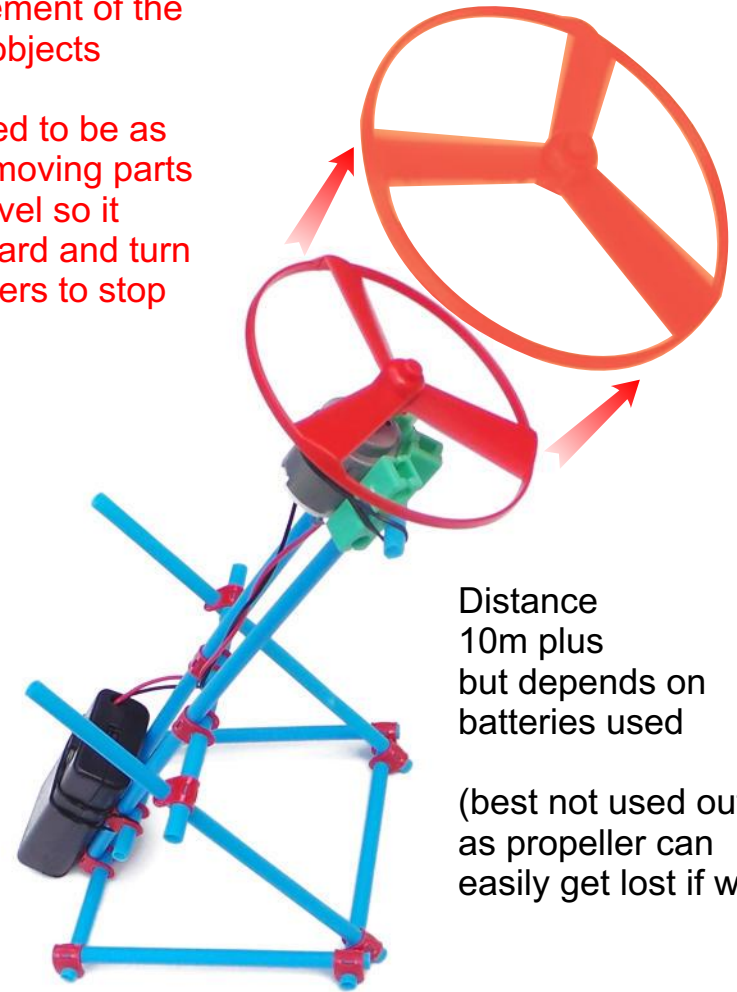
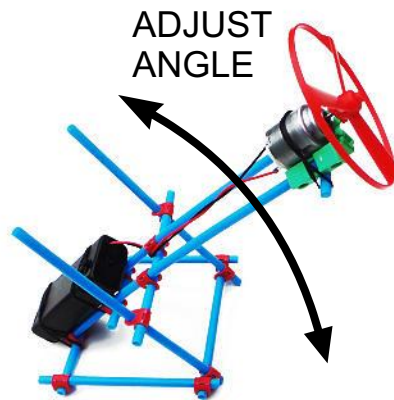
Have fun making the propeller fly through an open door or a poster on a wall acting as the target or make your own target with scores marked on. The action being a) aim at target (angle can be adjusted) b) turning switch on c) when the propeller reaches speed it will fly from the driving spigot. Needs two AA battery cells (not supplied)

#### SAFETY

Test in a safe area where movement of the propeller cannot cause you or objects any problems or damage. The propeller has been designed to be as safe as possible but like all all moving parts keep behind the direction of travel so it cannot hit you as it travels forward and turn power off rather than using fingers to stop propeller motion

### Keywords / Knowledge

Electricity, energy conversion, kinetic energy, jet of air, angle adjustment, aerodynamics, testing, efficiency, power, voltage, current and speed.



Size 20cm long x 20cm high

Distance 10m plus but depends on batteries used

(best not used outside as propeller can easily get lost if windy)

# Propeller Launcher Parts List

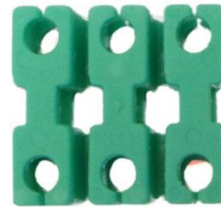
## Structural Parts



8 x Kre8 5mm dia. blue tubes 200mm long



2 x Kre8 cross pieces strips



1 x Kre8  
green connector



4 x Kre8 band  
coloured

## Electrics



1 x fast electric motor 3Volts



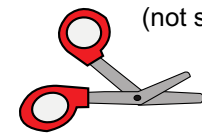
1 x battery holder

## Dual Purpose Propeller



1 x kre8 dual purpose  
propeller and flying spigot

## Tools



snips

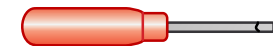
(not supplied)



abrasive  
paper



pencil



small screwdriver



ruler



# Using the Cross Pieces Assembly TIPS



1



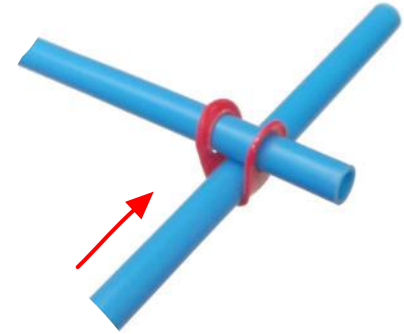
Slide **cross piece** on the **tube**

2



**Fold** over to make a **loop**

3



Slide **second tube** into the **loop**

## Tips

### Fold Cross Piece

Assembly is easier if the **cross pieces** are folded as shown below before sliding along the tube

*Fold ready  
to use*

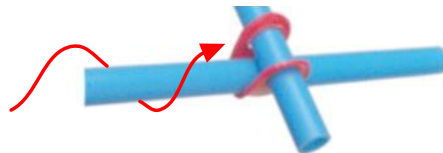


### Remove Cross Pieces on strip as needed

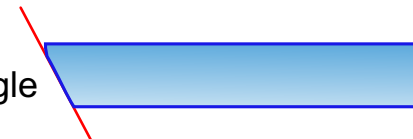


### Twist and insert Tube

Twisting the tube as inserted can also make assemble easier



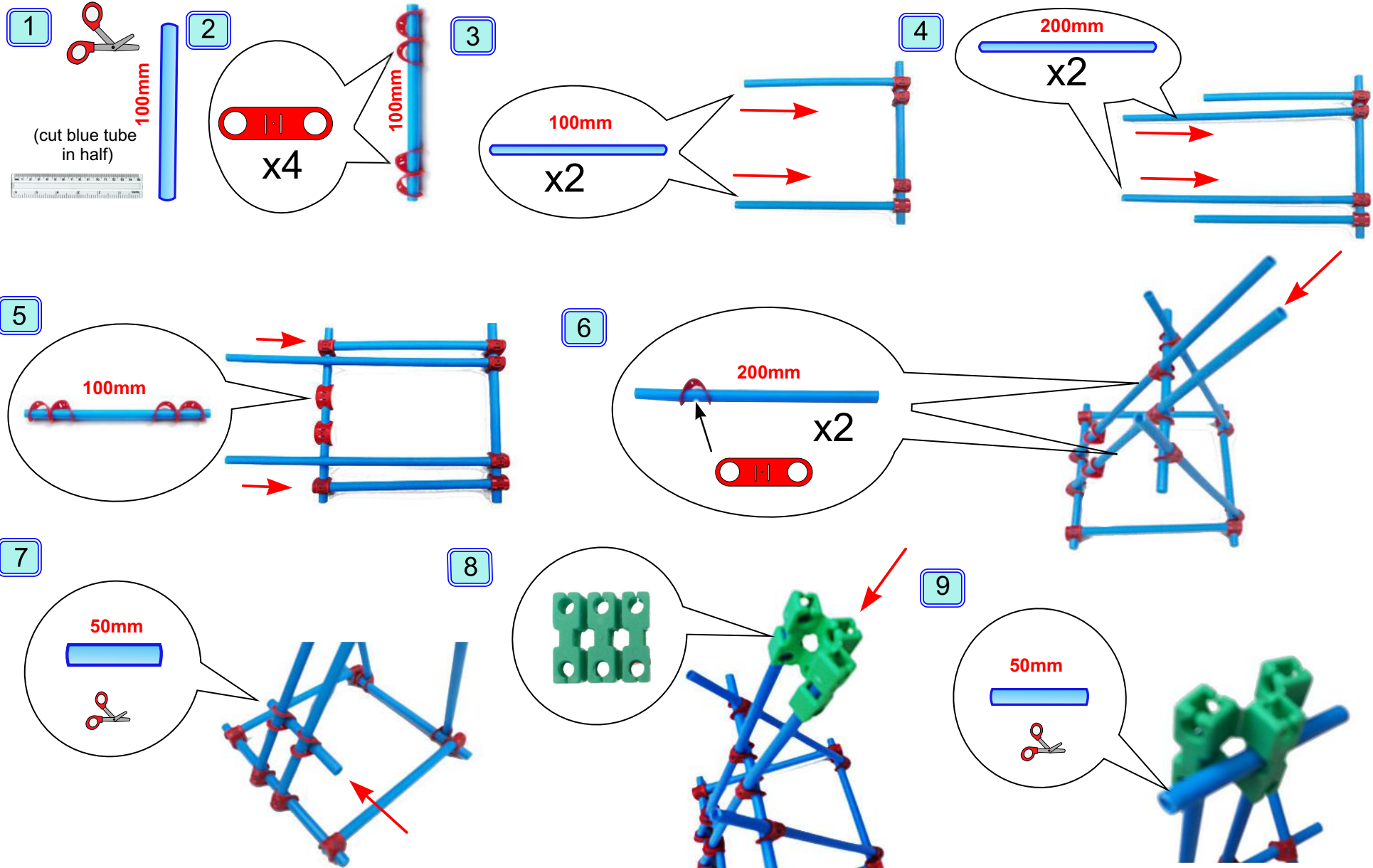
angle



Cutting tubes at an angle can makes assembly easy

# Propeller Launcher

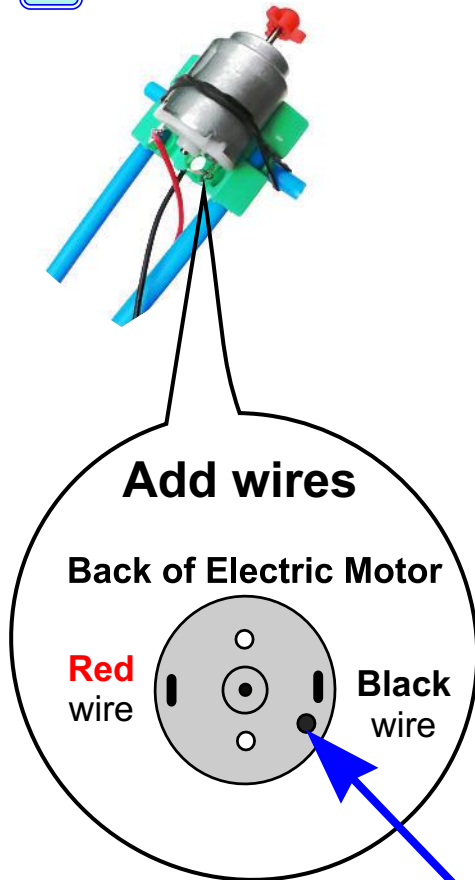
Making Step by Step 1 of 3 pages



# Propeller Launcher

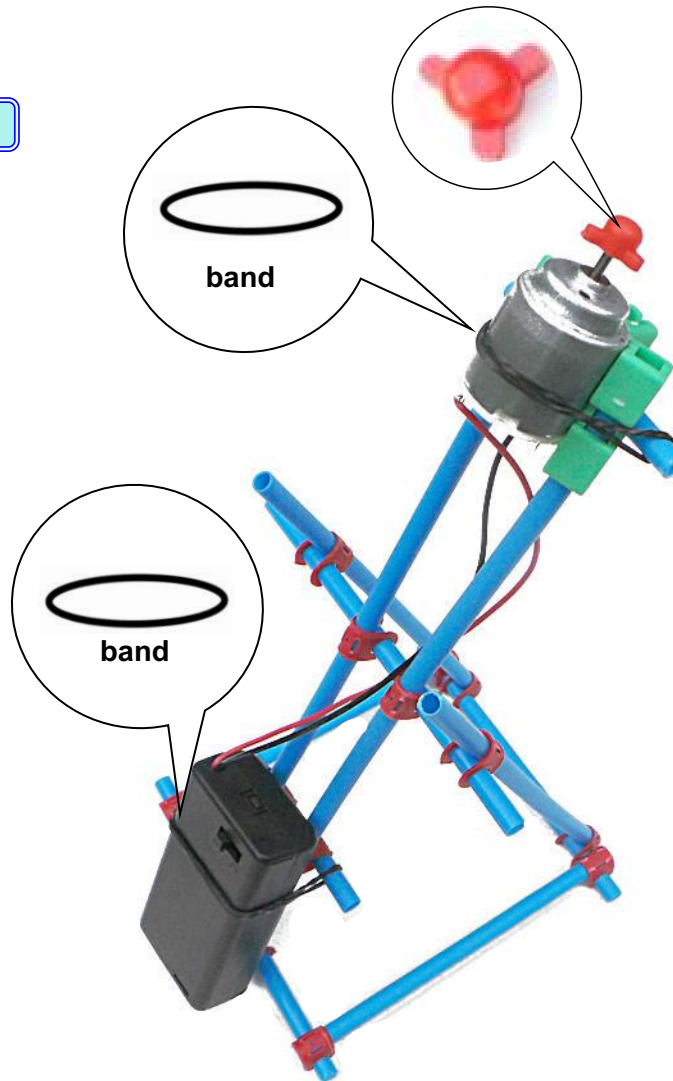
## Making Step by Step 2 of 3

10



Use battery holder wires.  
Black goes to indent dot

11



12



*Note - If motor rotates the wrong way  
the wire need to be switched over*

# Propeller Launcher

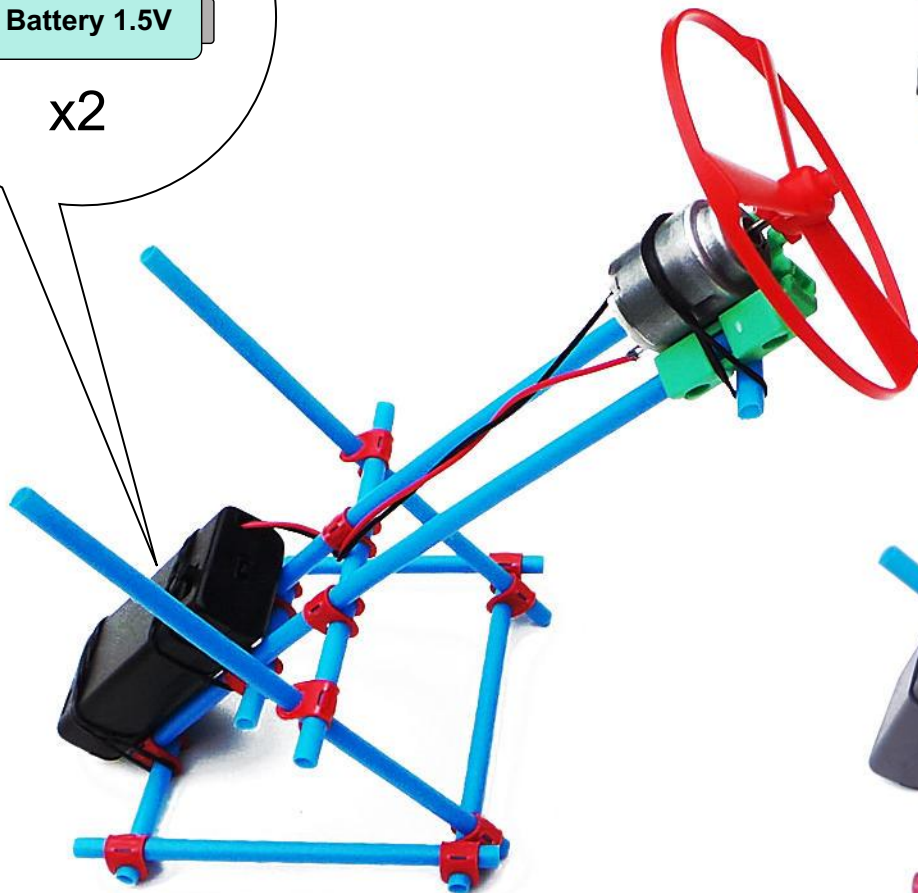
## Making Step by Step 3 of 3

### TO USE

- a) Adjust angle as wanted
- b) Turn motor on
- c) Watch it fly.....

AA Battery 1.5V

x2



### SAFETY

Stand behind the propellers direction of travel so it does not hit you or anybody else.

DON'T use in a place where delicate objects can be damaged or knocked off shelves etc.

### BATTERIES

Do not leave them in holder when not being used