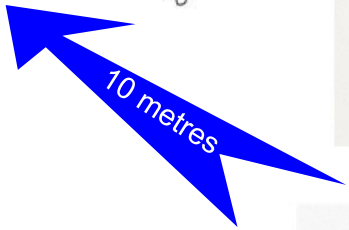
Basketball Flier

Aim, fire and score by hitting the basket (about 10m away)

Contents

Get the flying propeller into a basket (or whatever target you decide to use). Could be an image try to get through an opening such as a window.



Adjusting angle

Adjusting angle

Activities

Have fun playing basketball flier which can consist of seeing how many times you can score by hitting the basket with the propeller (up to 10metres away)
To do a) Make kit b) place 2 AA batteries in battery holder(not supplied). c) place propeller on the spigot. d) adjust angle to shot e) turn motor on f) propeller flies off when spinning fast.

Key Words

Projectile, energy conversion, switched circuit, electric motor, adjustable structure, projectile, variables force, propeller, aerodynamics, aerofoil pitch, stability, testing, power, battery, voltage, testing and recording results.

Safety

1) Stand behind when shooting
2) DO NOT aim at people directly.
3) Only fly in a safe place with no delicate objects that could be hit and knocked off shelves etc.
4) Don't fly outside if windy as propeller could get lost.
5)Remove batteries when not in use.

Features

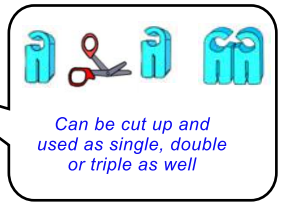
200mm high, flying safety propeller, launched by electric motor controlled by 3V volt switched battery and all mounted on an adjustable launching frame.

basketball flier

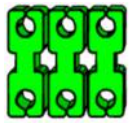
PARTS LIST
Slit rods
4 x 200mm
4 x 100mm
1 x 120mm
Other
1x yellow snap rod 40mm
3 x clip connectors
3 x multi-blocks
1 x Kre8 Propeller + adapter
1 x 45mm rubber band
1 x 60mm rubber band

Electrics
1 x small fast motor
1 x 3V battery pack with switch
(2 x AA batteries - not supplied)

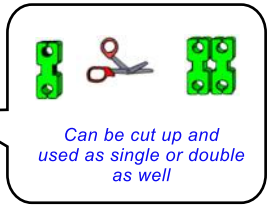
Blue clip connector
(strip of 4)



3 x Clip connectors

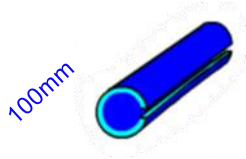


Green multiblock connector
(strip of 3)

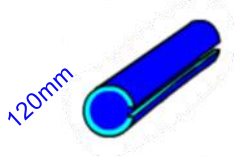


3 x Multi-blocks

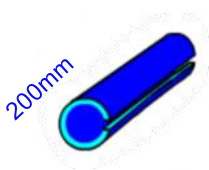
Instructions on the web
www.kre8.com



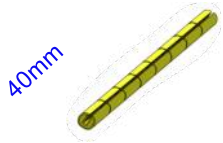
4 x 5mm slit rod



1 x 5mm slit rod



4 x 5mm slit rod



1 x yellow snap rod
4mm 5mm (or wood rod)

Abrasive paper

1 x rubber band

1 x rubber band

1 safety propeller with launch adapter

Plastic Bag

Safety and Other Information PAPER INSERT

Optional

Label - Not supplied

If wanted you can print this page out and use as a label

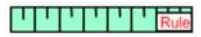
Electrics

1 x fast motor

1 x 3V battery holder
(2 x AA required)

Tools you are likely to use

Snips
(recommended)



Rule (metric)

Basketball Flier Assembly 1/2

TO MAKE ALL SIZES IN MM

Use these 'step-by-step instructions' as a guide and adapt as you want.

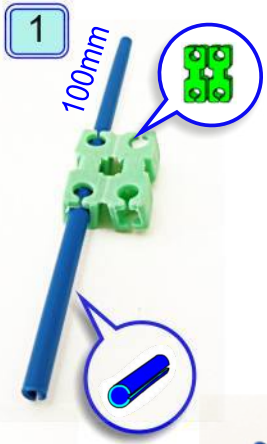
NOTES

1) **ONLY** cut up connectors as needed
2) Use metric ruler for measuring
3) For **EASY assembly** -

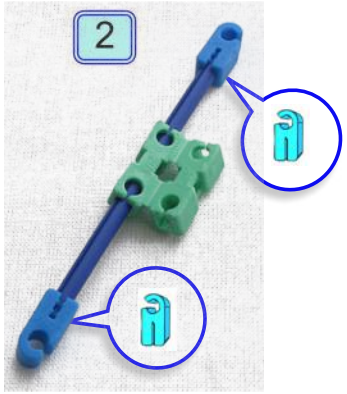
a) Smooth and round the end of the rods with abrasive paper then

b) **Push and twist** the rods into place.

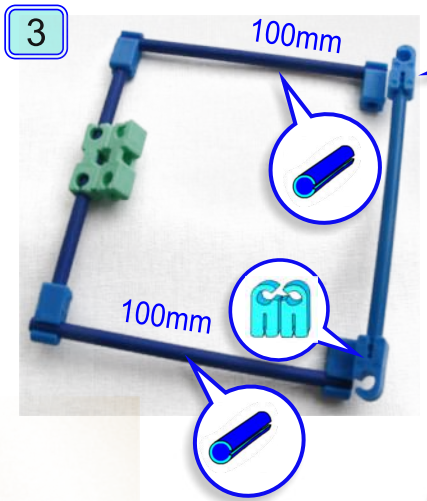
1

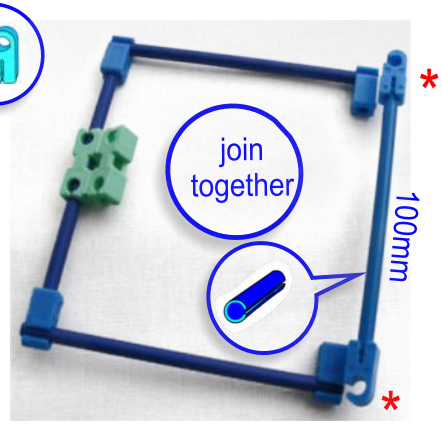


2

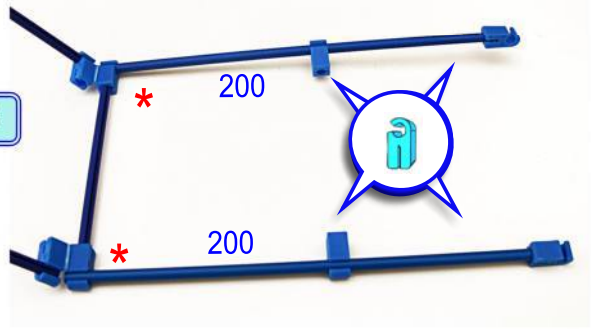


3

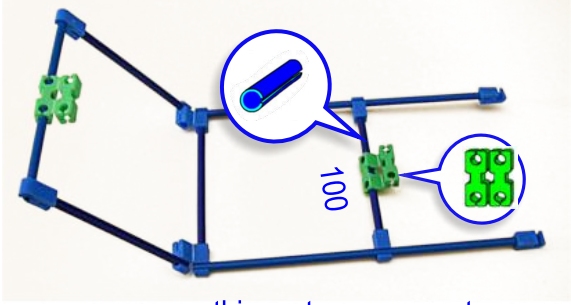




4

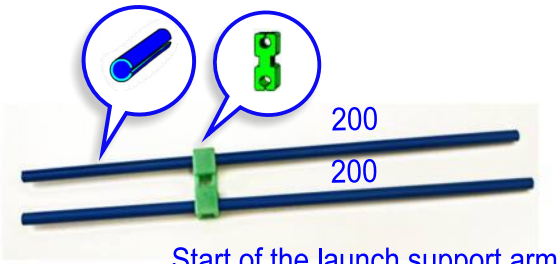


5



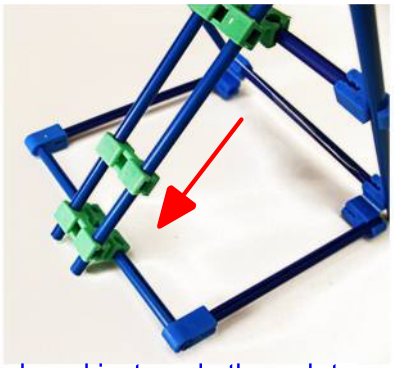
this part now compete

6



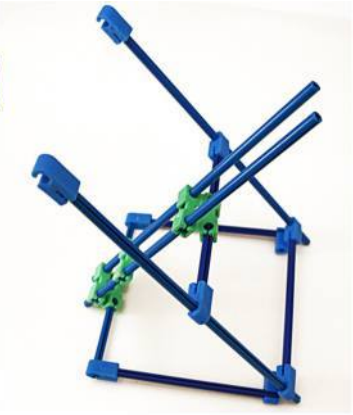
Start of the launch support arm

7



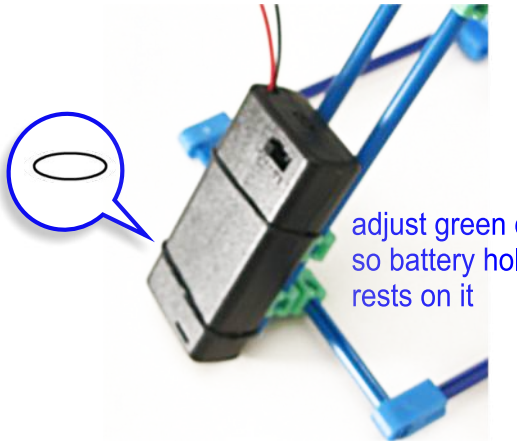
Push end just made through top green connector then into bottom green connector.

8



When frame is complete it will look like this.

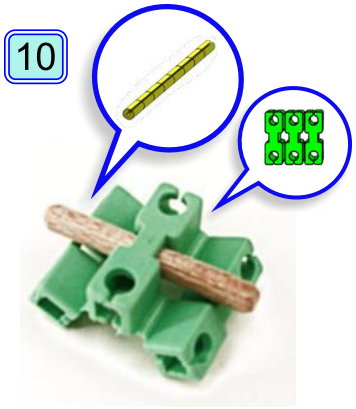
9



Fix battery holder by using the longer rubber band (slide holder under rubber band).

Basketball Flier Assembly 2/2

10

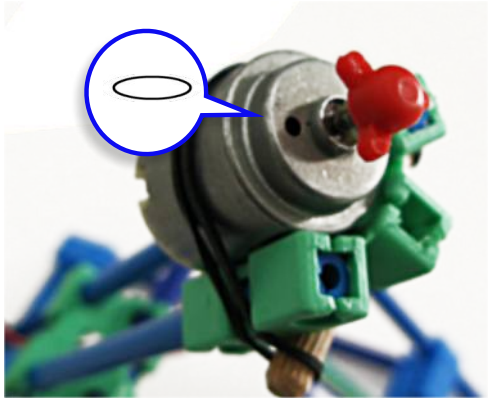


motor holder
snap off rod to
40mm

11

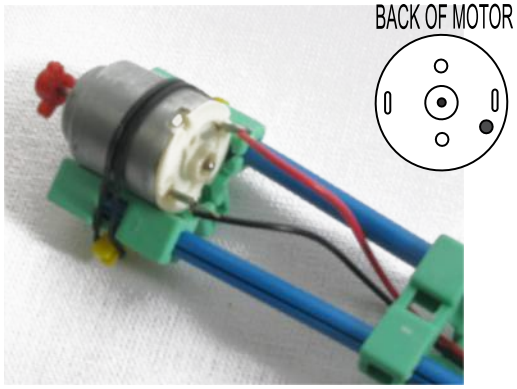
Push motor holder onto the end of the two 200 rods

12



Fix motor in place by looping rubber band over as shown

13



Connect up so black wire goes to the connector next to circular indent
(if wrong motor will turn wrong way)

14

Place propeller on the launch adaptor

15

Test all works well

Try adjusting angle to different positions

Basketball Flier - Photos