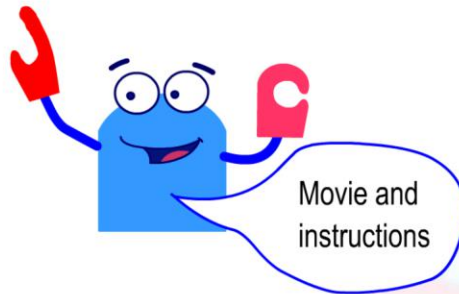


## Contents

- P1 Introduction
- P2 Parts List
- P3 Making 1
- P4 Making
- P5 Card Parts
- Assembly movie



## A Fantastic Flier



## You will learn & achieve

**Knowledge** - Potential energy, stored and kinetic energy, rotary motion, air power. centre of gravity, balance, bearings, measuring, reducing friction, obtaining grip, mass and speed.

### Making

Assembly and constructions skills - test then adjust to get best results. Possible competition.

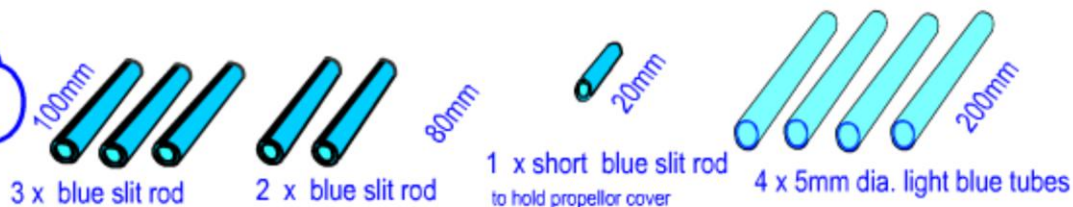
**Designing** - User can use the given design or adapt to make own.



# Kre8® Air Powered Car - Parts List version 3



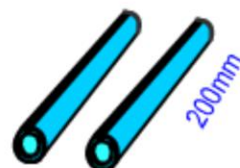
Trim all sharp edges after cutting



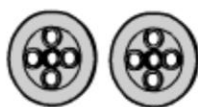
4 x Multiblocks (green)



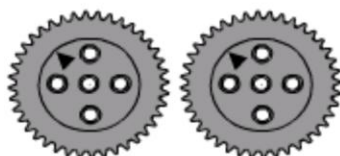
4 x clip connectors - blue



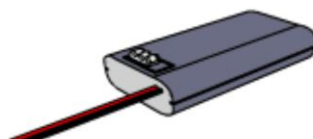
2 x blue slit rod



2 x 28mm wheels



2 x 40mm gears



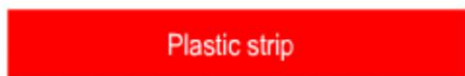
3V Battery Holder with switch



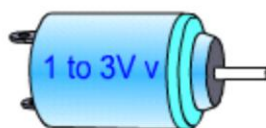
Bag



3 x 40mm rubber bands



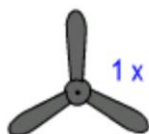
1 x long red strip sheet plastic



1 x Small Fast motor type



Insert 1 Making instructions + safety



1 x 3 bladed propeller



8 x 3mm steel washers



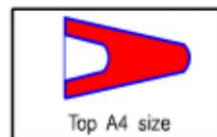
4 x 3mm dia x 15 mm long or (or 18mm long)



2 x 5mm blue collars



Abrasive paper



Top A4 size

## Tools

### Snips

Use to cut Kre8 connector hinges, plastic sheet, light blue tubing etc

Note - Scissors are not very satisfactory as they do not have serrated blades.



### Emery Cloth

Use fine 'emery cloth' or other 'abrasive paper' to round and smooth the slit rod or blue tube ends to make assembly easier.



Abrasive paper

### Pencil and Rule

Use to mark lengths of blue tube or slit rods before cutting. Can also be used on plastic sheet before shapes are cut out.



Pencil

### Screwdriver

Use to tighten the bolts to hold wheels on

### Plastic laminate sheet

Can be used to laminate the card parts (to make more durable)

Note - Only useful if you have access to a plastic laminator.

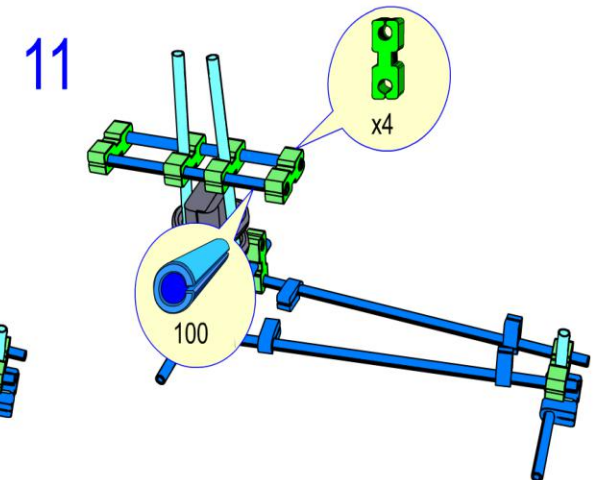
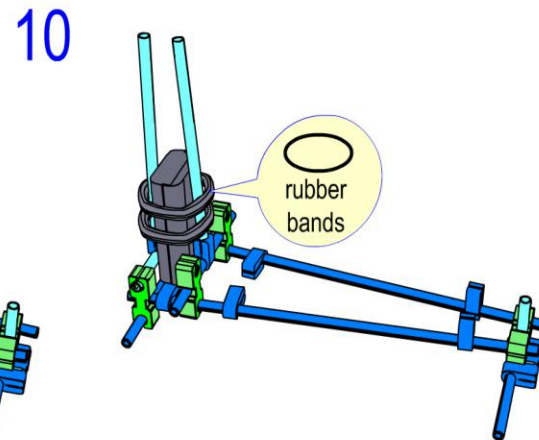
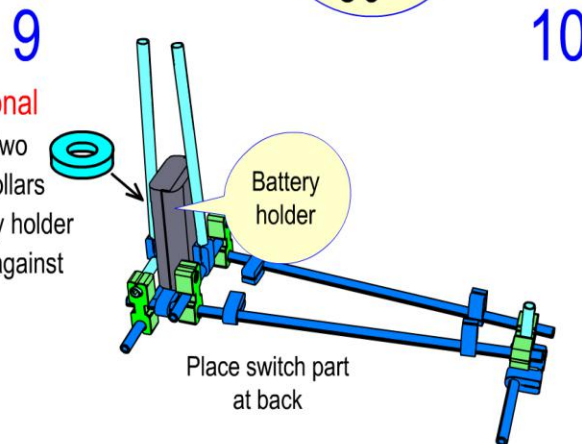
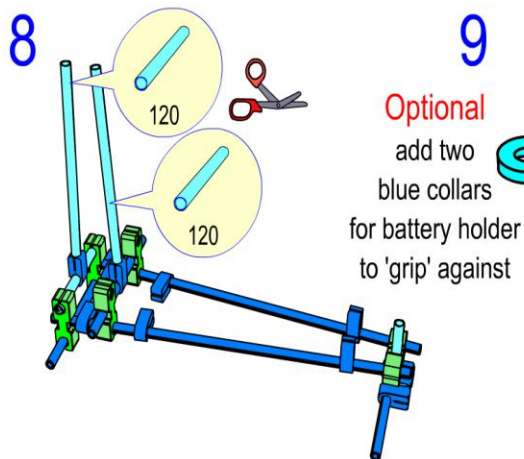
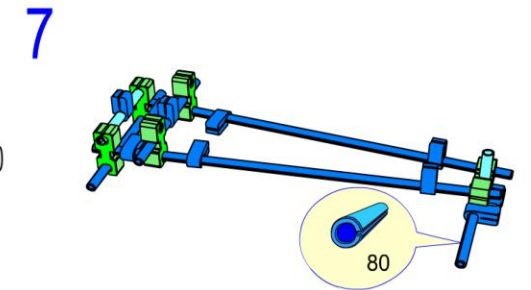
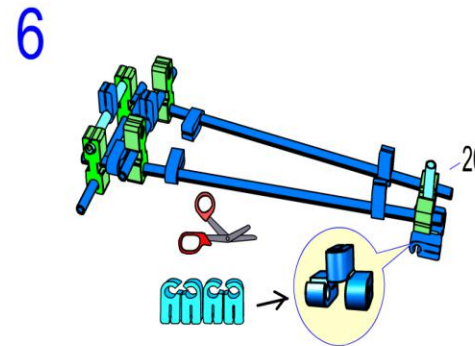
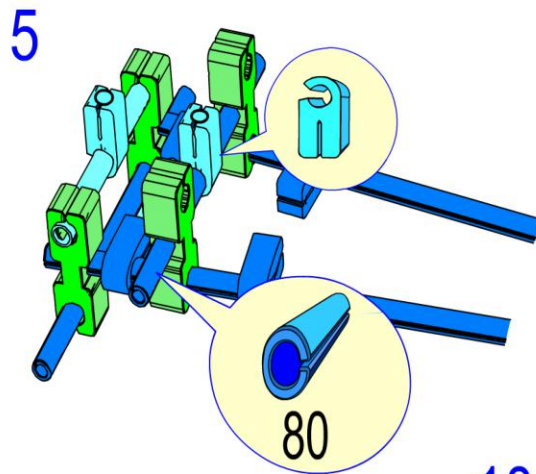
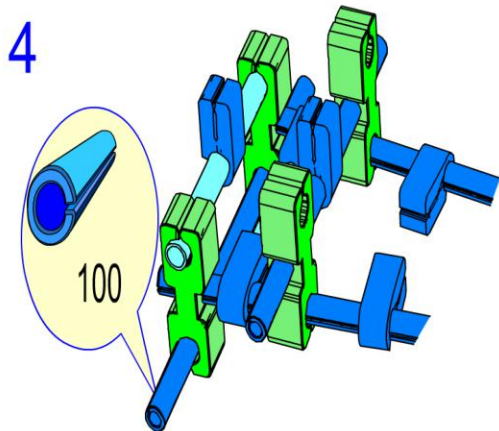
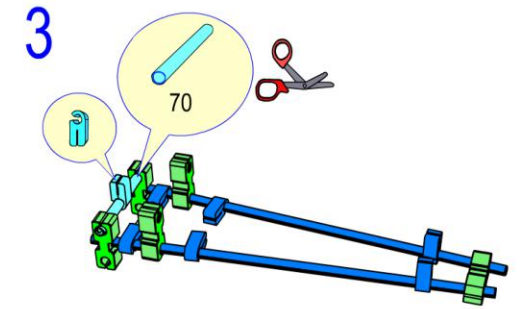
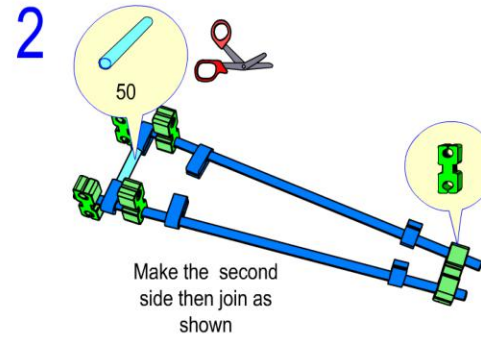
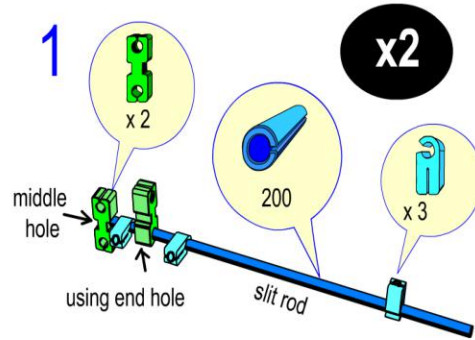
## For Easy Assembly

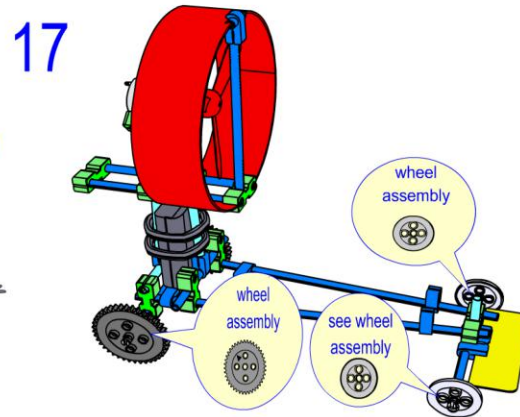
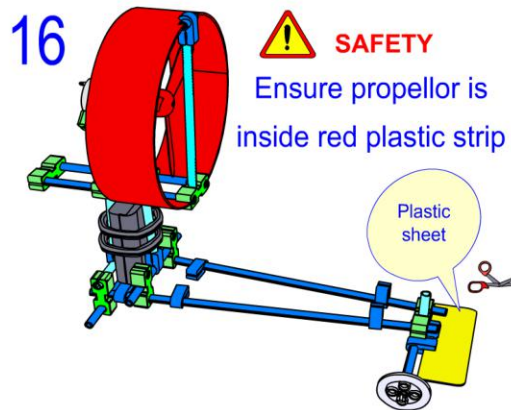
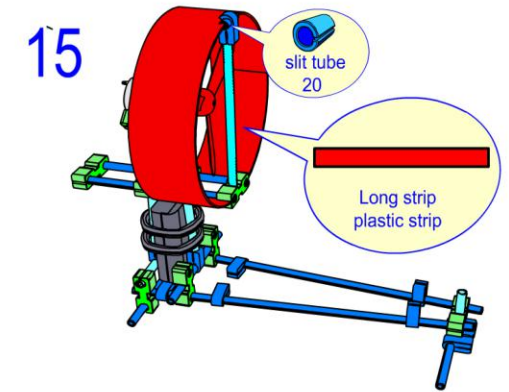
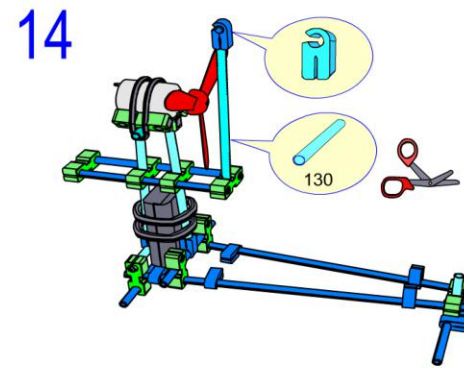
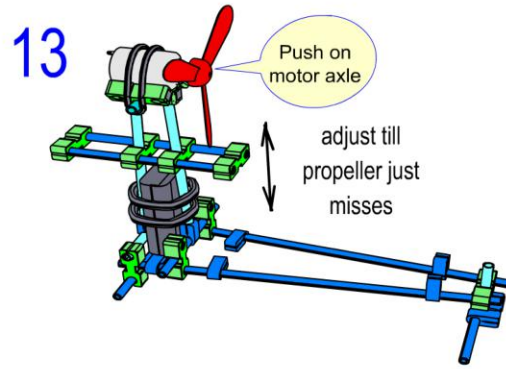
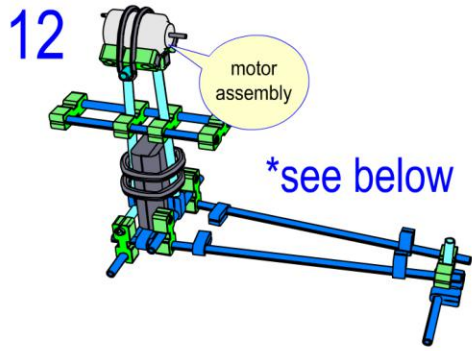
The rods are easier to insert into the connectors if twisted as they are pushed into place.

Younger students should 'round off' and smooth the tube and rod ends using the abrasive paper.

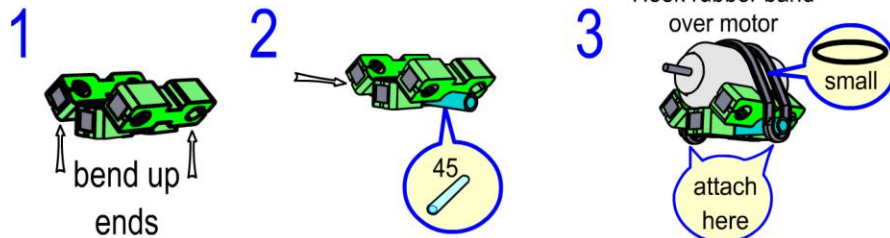
*Note - To make assembly easier - smooth and round the ends with abrasive paper before pushing into the connectors.*

Sizes in mm

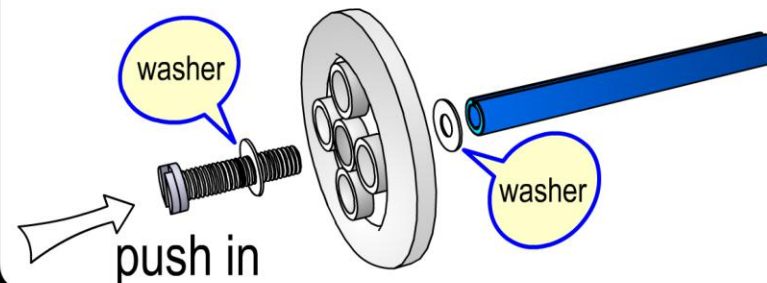




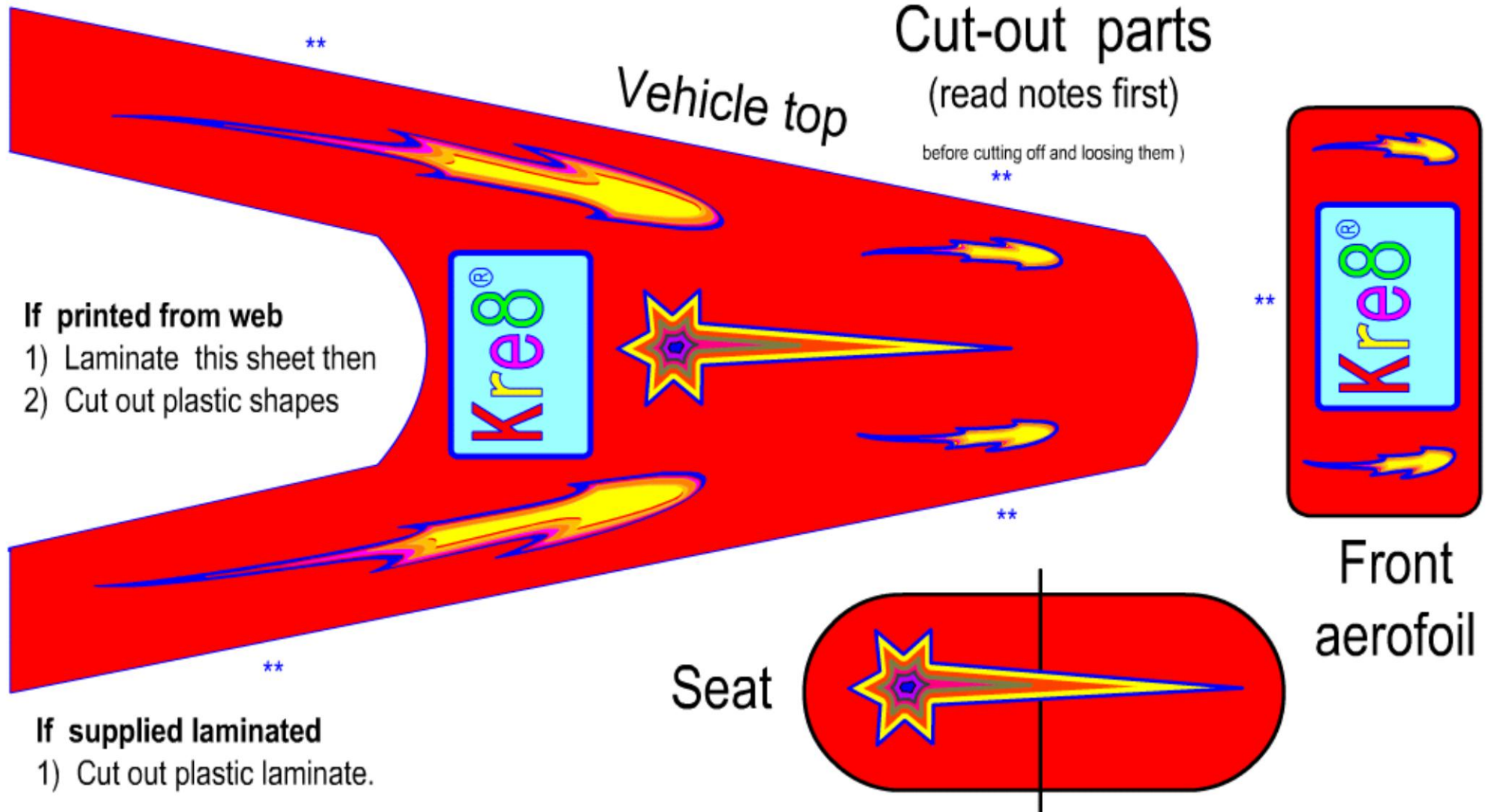
## Motor Assembly



## Wheel Assembly



Can use screwdriver for fine adjustment to get best spin effect



**If printed from web**  
1) Laminate this sheet then  
2) Cut out plastic shapes

**If supplied laminated**  
1) Cut out plastic laminate.

To ensure these parts are tight fit in the Kre8 connectors clear tape can be folded over the edges where marked \*\* until a good tight fit push is obtained. (only needed where shape pushes into the kre8 connectors)