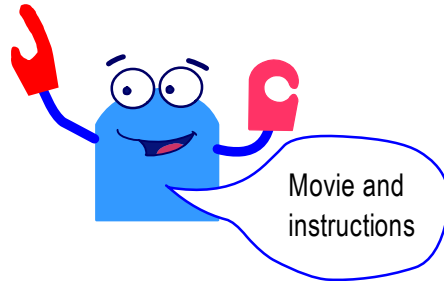


Contents

- P1 Introduction
- P2 Parts List
- P3 - 6 Ideas
- P7 Caster wheel



SEE WEB

The Kre8 System


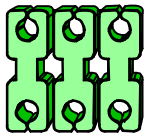
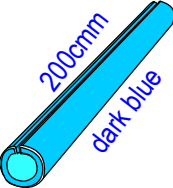

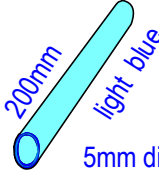
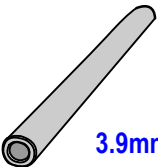
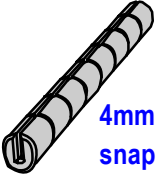
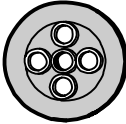


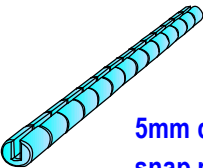

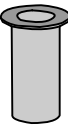







It has been designed to be used on its own but also so it can be used with the popular construction kits including Lego® Technik and LEGO® MINDSTORMS® for Schools. Kre8® slit rod can be inserted by hand into holes from 4.7mm to 5mm which includes the Lego® Technik holes and slots used in Knex® parts.

This robot support pack has been put together to support competitions such as RoboCup Junior which allows any construction method to be used to take part in the dance, rescue, and football competitions. It assumes you already have a basic small robot and you want to add extra decoration etc



RoboCupJunior is a robotics event for schools, with very open ended rules. RoboCupJunior includes three challenges: **Soccer, Rescue, and Dance.**

<http://robofesta.open.ac.uk/planetscience/>

-  **x6**
Clip connector
-  **x5**
Multiblock connector
-  **x6**
200cm dark blue
-  **x6**
80mm dark blue
slit rod 5mm dia.
-  **x2**
200mm light blue
5mm dia. tubes
-  **x1**
3.9mm dia.
-  **x1**
4mm dia
snap rod
-  **x1**
wheels 28mm
-  **x1**
Abrasive
paper
-  **x4**
480mm dark blue
-  **x1**
5mm dia
snap rod
-  **x2**
metal washer
-  **x2**
metal bearing
for 3.9mm tube
-  **x2**
End cap
-  **x1**
Holographic
card
-  **x1**
A4
plastic bag
sealable
-  **x2**
6cm
rubber band
-  **x4**
5mm collar
-  **x4**
4mm collar
-  **x1**
5mm bendy tube
60mm long

Tools

Snips

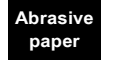
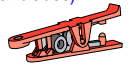
Use to cut

Kre8 connector hinges, plastic sheet, light blue tubing (the serrated blades are better than smooth blades) .



Kre8 Tube Cutter

Use it to score then snap rods and tubes etc.



Abrasive cloth or paper

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

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.



4mm dia. Drill Just in case the pulley wheel is too tight



PVA glue or a stick glue - to add decoration



SAFETY WARNING



Care needs to be taken with all sharp tools -
Students under 9 years old need to be supervised by an adult.

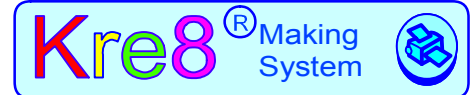


Parts List

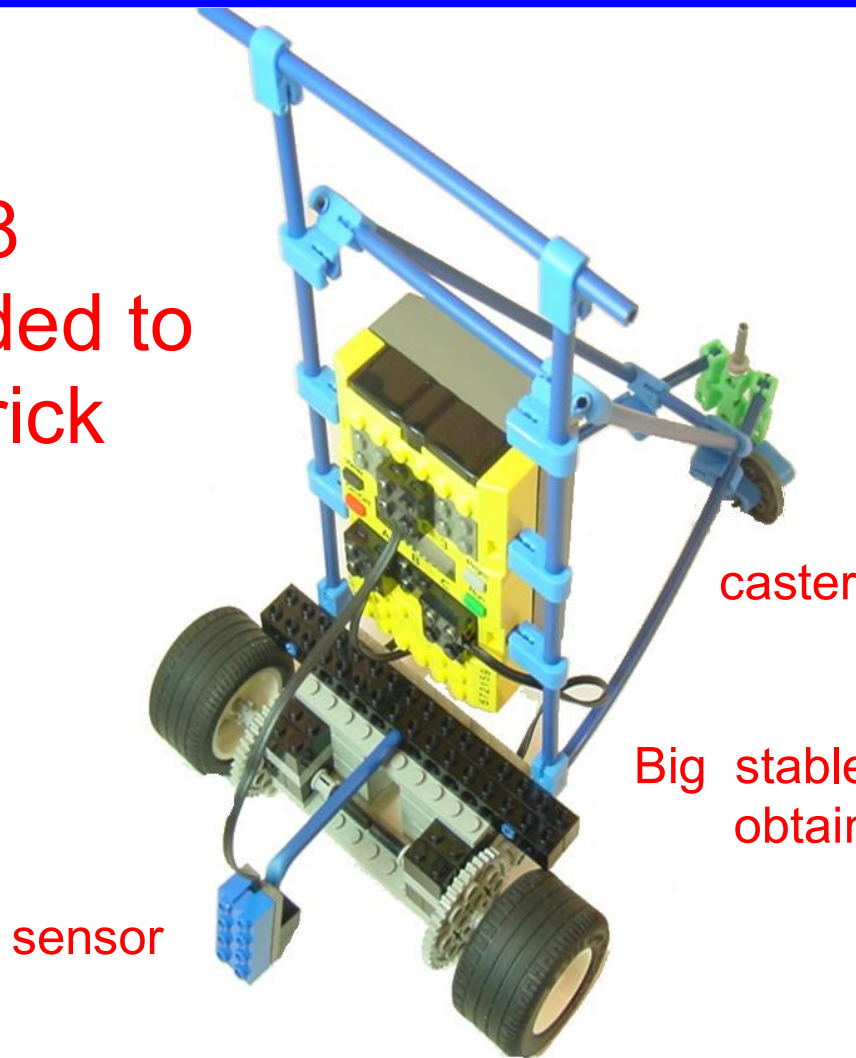
Teachers -You can also obtain spare part packs.
Textiles or card may also be needed to cover the framework (eg old shirts for ghosts etc) and needle and thread.

NOTE - This kit will make a caster wheel and a framework for your robot like these shown on next pages

3 Ideas - Adding Kre8® to a Lego® RCX brick



Kre8
frame added to
RCX brick



Big stable frame
obtained

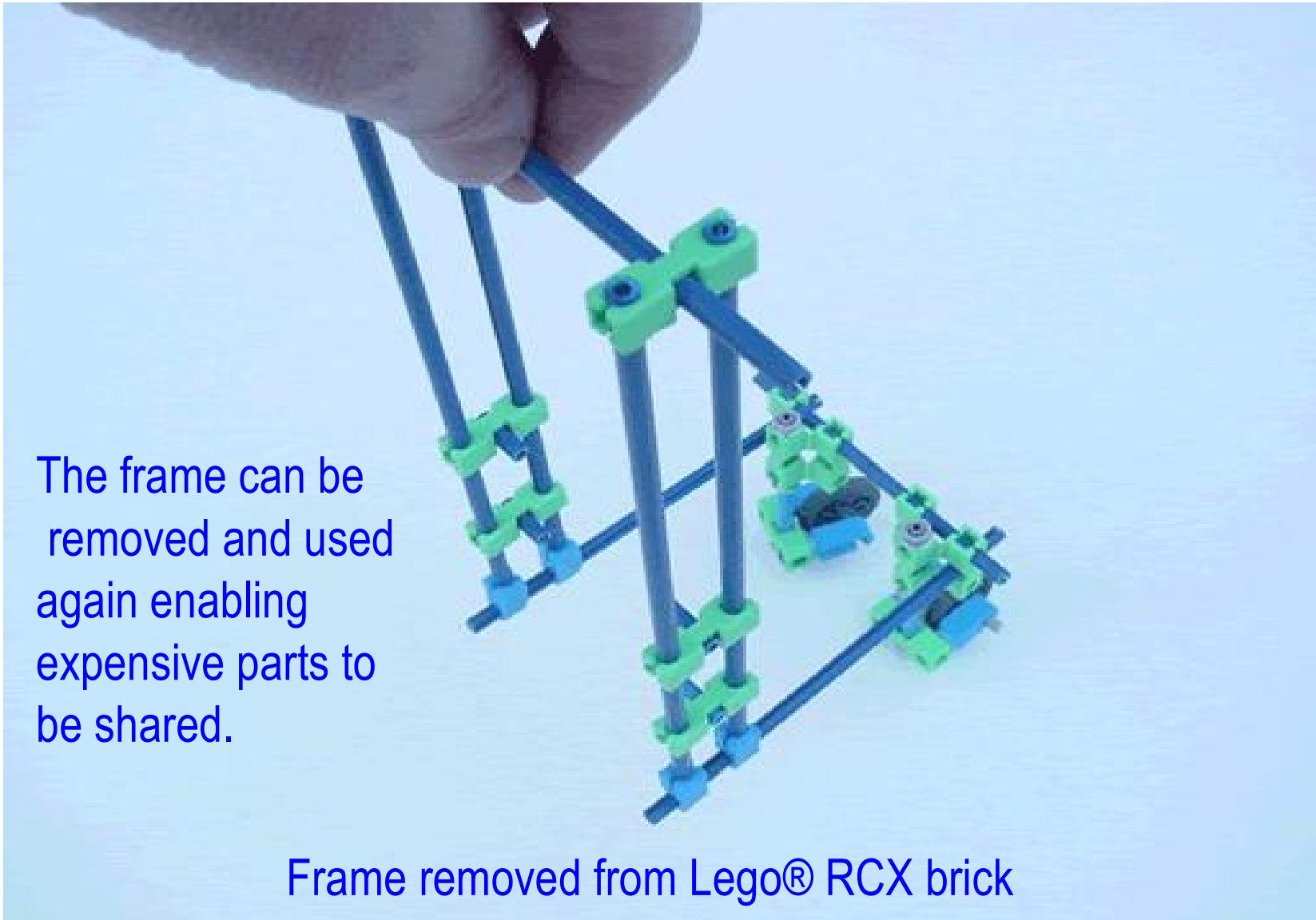


This frame layout has easy access to
the **batteries** and **program controls**

6 Ideas - Adding Kre8® to a Lego® RCX brick

The frame can be removed and used again enabling expensive parts to be shared.

Frame removed from Lego® RCX brick



5 Ideas - Adding Kre8® to a Lego® RCX brick



Extra stable layout -
good for a taller models

TWO casters used

7 Ideas - Adding Kre8® to a Lego® RCX brick



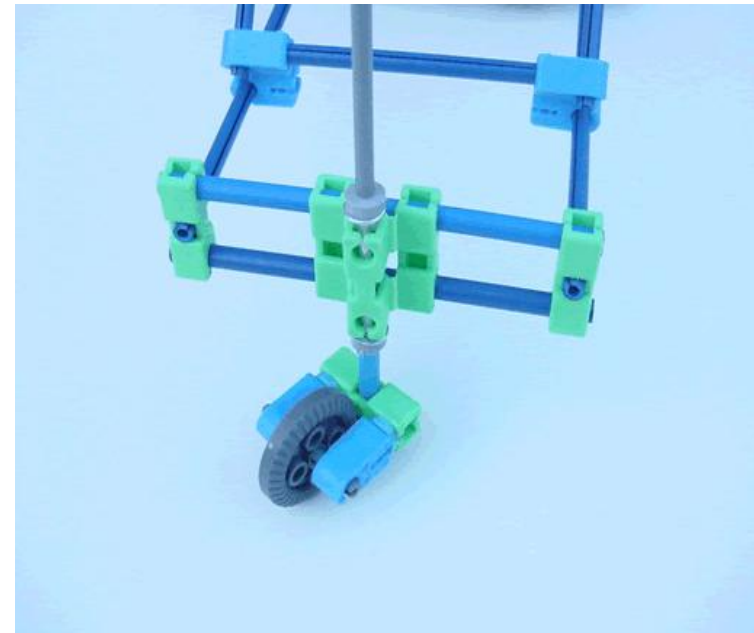
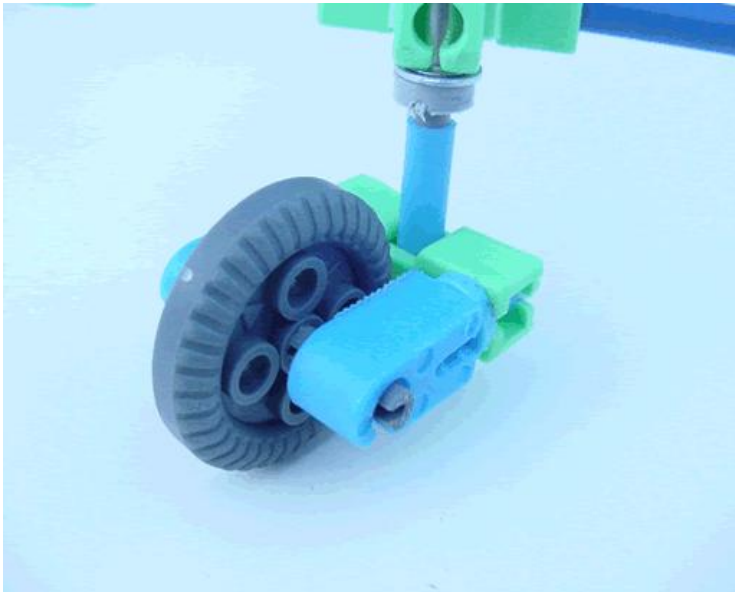
Possible layout with easy access to controls but batteries replacement is difficult as the front wheels need removing to get access



Can be made tall using 480mm rods

4

Kre8 Caster wheel detail



Note

For making details - see 'How to make a Kre8 caster' step-by- step on this website