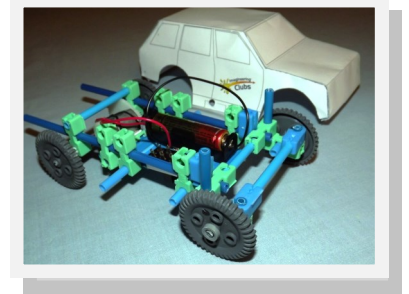


# ELECTRIC CAR

## TEACHERS/TUTOR NOTES



The project will take around 5 weeks to complete.

The following are suggested topics for introduction and discussion.

### A. CHASSIS and MOTOR DRIVE

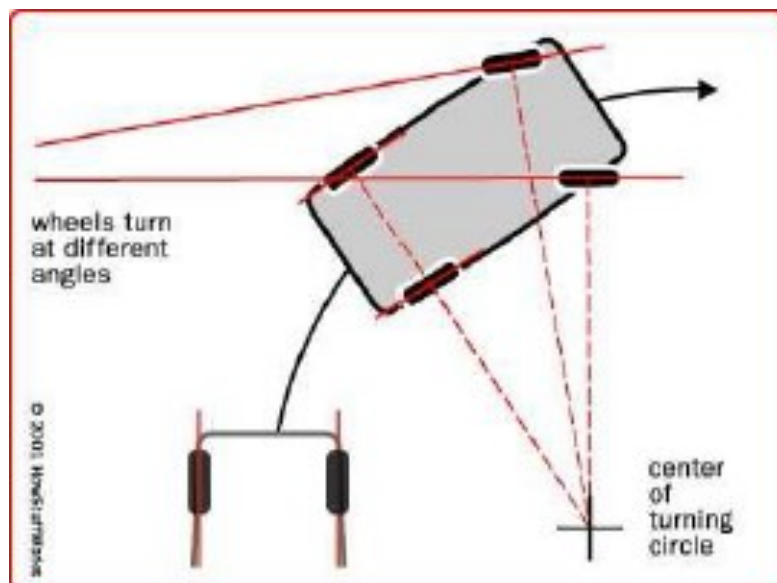
- Main functional sections of vehicle, links to the proposed model
- Drawings and dimensions related to making chassis),
- Types of power unit,
- Pros and cons of electric drives,
- Gears and transmissions.

<http://auto.howstuffworks.com/engine1.htm>

### B. FRONT WHEEL ASSEMBLY

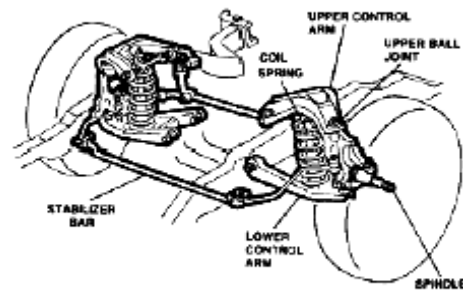
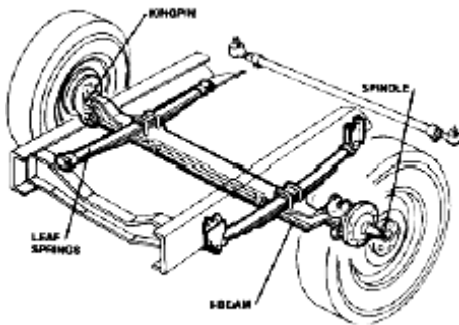
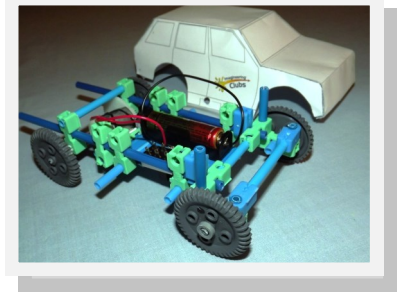
- Functional requirements,
- Geometry
- Steering and linkages

[http://www.procarcare.com/icarumba/resourcecenter/encyclopedia/icar\\_resourcecenter\\_encyclopedia\\_suspsteer3.asp#geometry](http://www.procarcare.com/icarumba/resourcecenter/encyclopedia/icar_resourcecenter_encyclopedia_suspsteer3.asp#geometry)



# ELECTRIC CAR

## TEACHERS/TUTOR NOTES



[http://www.chris-longhurst.com/carbibles/suspension\\_bible.html](http://www.chris-longhurst.com/carbibles/suspension_bible.html)

<http://auto.howstuffworks.com/steering.htm>

### C. MAKING THE BODY

- Functional requirements of bodies
- Doing net shape developments
- Making the standard card body is reliable and the way to bring the project to a conclusion.
- But designing and making their own bodies is an opportunity for creative work. This needs stage managing. Pictures of various types of bodies – preferably scaled to the wheelbase of the model – can give them ideas.
- The instructions now outline how to manually develop their own bodies and also refer to using CAD specifically the free Google Sketchup program (see separate note). Some schools may have heat forming facilities that could be applied with different material.