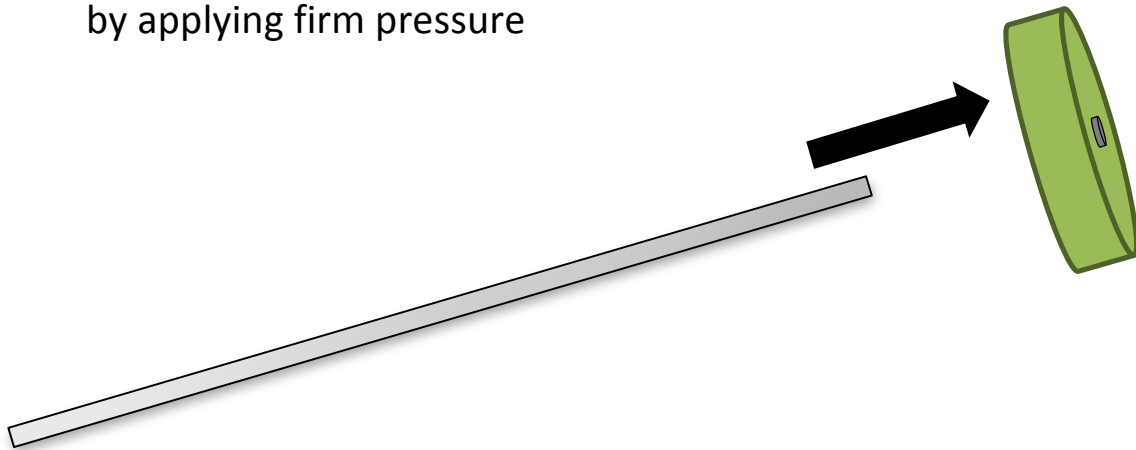


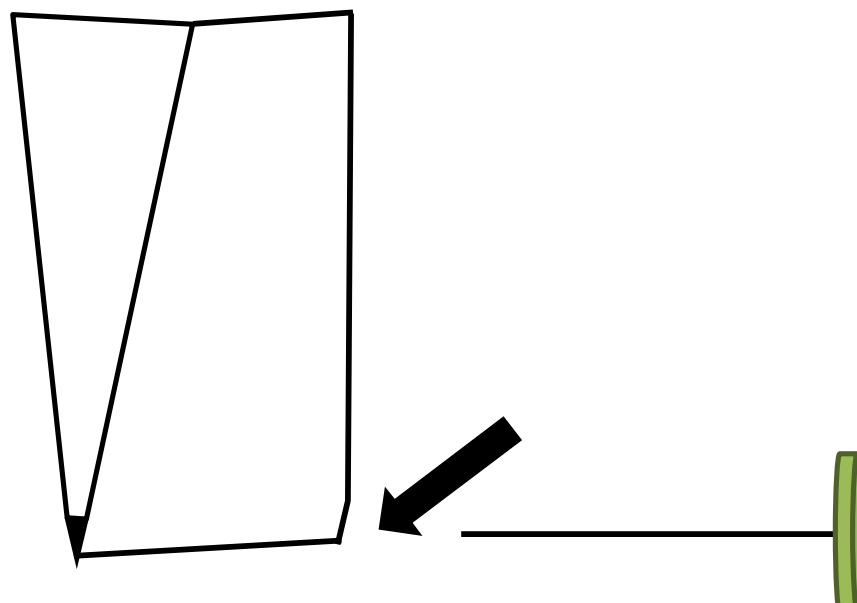
Part 2: Tetra Pak Solar Car

Instructions on how to put together your solar car:

1. Insert a straw through the holes at the flat end of the Tetra Pak where you have cuts holes. The straw will need to be cut to the width of the flat end.
2. Take the long axle; place one of the smaller wheels on one end by applying firm pressure



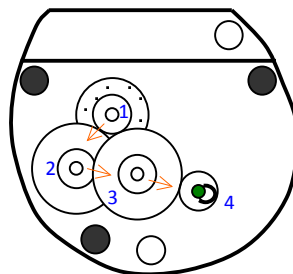
3. Insert the long axle through the straw. This will help to reduce friction between the axle and the Tetra Pak
You can experiment with diameter of straws to find the one that gives the car the best performance



4. Place the second small wheel on the end of the axle and the front of the solar car is done.

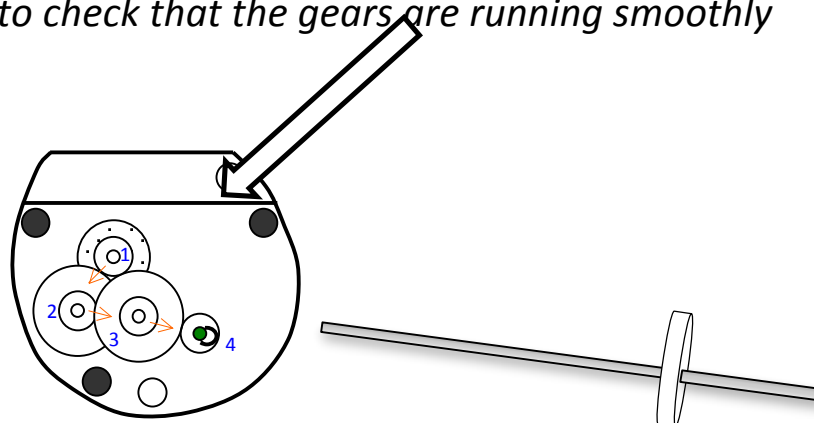
Note: Place a coin under the first wheel so that the axle doesn't get pushed through to far whilst trying to attach the wheel

5. Now you want to get the motor and the gearing together. With open end of the motor facing you and the flat edge at the top, place the cogs into their places, flat side down.



There are multiple gearing arrangements that affect the power and speed of the solar car; these can be found in the gearing work sheet.

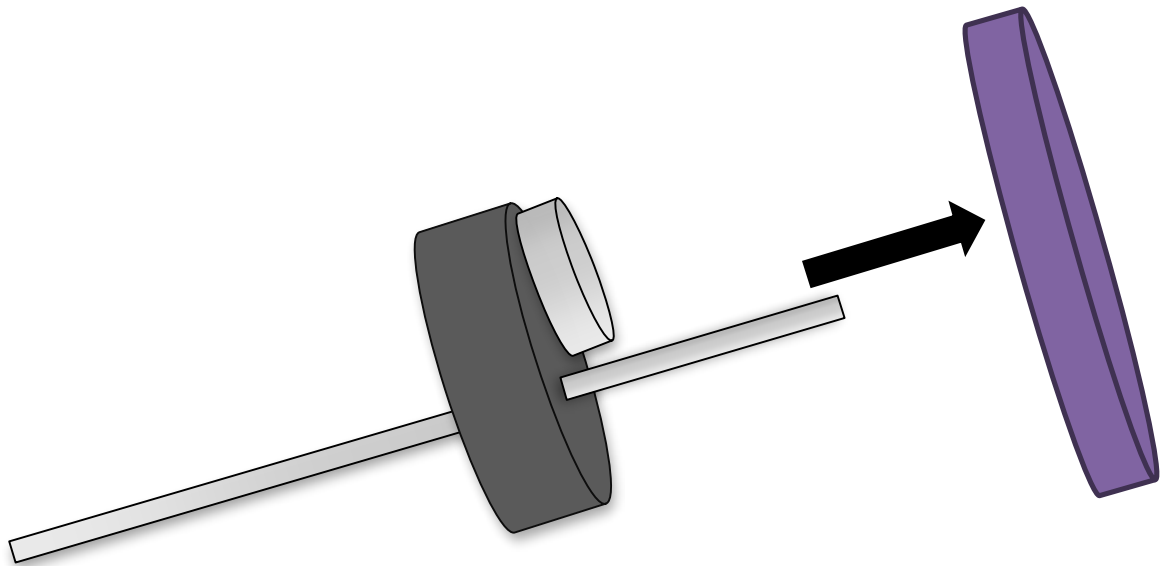
Place the small axle through the hole on the left hand side and place the cover over the gears. *Before placing on the cover you will need to check that the gears are running smoothly*



6. Now place the large wheels on the shorter axle.

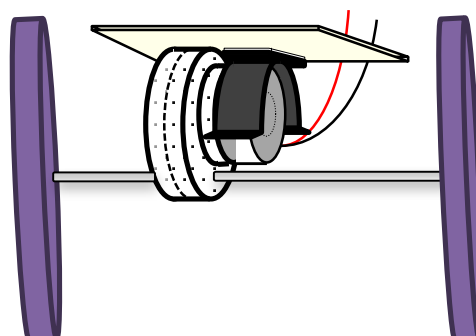
David Garlovsky: david@solar-active.com

You can use the small wooden block here when putting on the wheels by placing one end of the axle into the hole in the wood to steady the axle and helps prevent damage to home surfaces, remember to use a coin under the first wheel when attaching the second wheel so that the axle isn't pushed to far through the wheel



7. Place the engine holder on the back of the Tetra Pak, using the strip of Velcro and then place the engine with the axle and wheels attached into the engine holder.

The silver part of the motor that can be seen is the bit that is placed into the holder



8. All that is left is to attach the solar cell and connecting it to the motor wires.

The wires are colour coded with the red wire being the positive; the solar cell has a red marker next to the positive terminal.

With the gearing shown above the positive wire connects to the positive terminal for the car to move forward. By changing the gears you change the rotation of the wheels and so the connectors can be reversed so as the car still moves forward

