

# FITTINGS

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



World Association of Technology Teachers

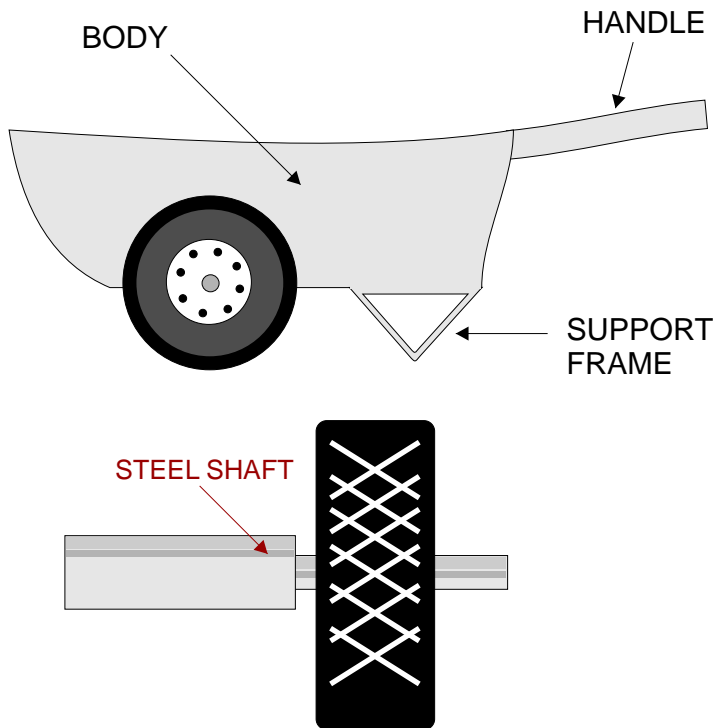
The 'Fittings Exercise' can be printed and used by teachers and students. It is recommended that you view the website ([www.technologystudent.com](http://www.technologystudent.com)) before attempting the design sheet.

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# FITTINGS AND FIXINGS

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1.



The diagram opposite shows a typical wheel barrow designed by a technology student. The wheel fits on to a steel shaft as shown below. The wheel barrow is designed to carry heavy weights.

1. On the diagram opposite, draw a method of fixing the wheel on to the shaft so that it is secure but can rotate with the minimum of friction. Remember, it is designed to take heavy weights.

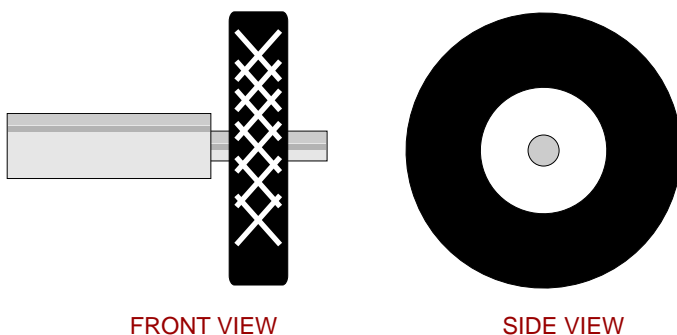
2.



The trolley opposite is designed to carry moderate weights such as packages and light loads.

The trolley arrives in a flat pack and is assembled by the customer. Because of this, the wheel mechanism must be put together with simple tools.

The wheels must rotate freely and yet hold the wheel on the shaft securely.



2. On the front and side views opposite, draw a suitable method of fixing the wheel to the shaft/axle. Your chosen design should allow the wheel to rotate freely and yet be secure. Remember, the method you choose should be so simple that it can be assembled with the minimum of tools. It must be possible for an unskilled person to assemble.