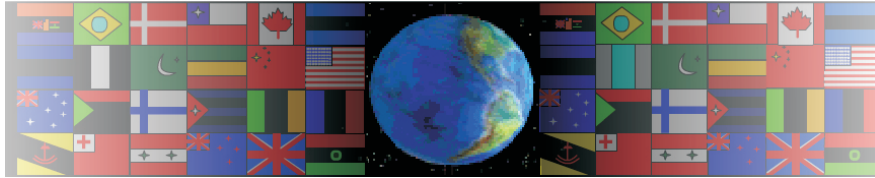


MATERIALS

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On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

The 'Materials Exercise' can be printed and used by teachers and students. It is recommended that you view the website section 'Graphics' (www.technologystudent.com) before attempting the design sheet .

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MATERIALS - SECTIONS AND TUBE

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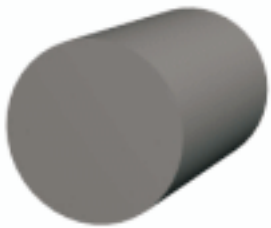
Metals are often supplied as solid sections or tubes. Each shape has a specific name. Print the correct name against the appropriate diagram shown below.

L-SECTION
ROUND SECTION
SQUARE SECTION
HEXAGONAL SECTION

L-SECTION TUBE
ROUND TUBE
SQUARE TUBE
HEXAGONAL TUBE

SOLID SECTION

TUBE SECTION

















Sketch in 3D each of the sections shown above.

List metals that are produced as tubes and sections.

What is the difference between a ferrous metal and a non-ferrous metal?

MATERIALS - SECTIONS AND TUBE

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1. What are the advantages of tube compared to solid sections?

2. Identify the parts of the bicycle shown below that are manufactured from solid sections and those that are manufactured from tube.



Explain why tube is ideal for most parts of a bicycle. You may wish to mention; weight, manufacturing process, cost and other relevant points.
