



# Scalefour Digest 4.1

## Scalefour Style

*A spelling and style guide*

### 1. Background and Purpose

1.1. Members of the Society are encouraged to offer articles for publication on the fruits of their research, lessons from their modelling, or other items of interest. While most members of the Society will prefer to be concerned, understandably, with precision in modelling rather than with niceties of grammar and style, precision is nevertheless important in these too, to convey information clearly and without any ambiguity.

1.2. This document therefore sets out the Society's style for printing and expressing various model engineering and railway terms, as well as some important general rules. It is not intended to stand in the way of individual writing style, far from it, for that would remove much enjoyment. Its aim is to help authors to communicate successfully with readers.

1.3. It is the responsibility of the editors of the Society publications to adjust any articles and contributions to maintain the standard style, but it will help them if the authors pay some regard to this document. The editors will normally follow the *Oxford Style Manual*, supplemented by this *Scalefour Style* guide.

1.4. For the meanings of railway terms, the editors will normally use the terminology in the railway safety publications issued by the Office of Rail and Road.

### 2. Some terms and their usage

In the following alphabetical list, individual words are shown in black, in the form used in the publications of the Society. Generic subjects are shown in blue. Explanations and/or examples are given where this seems helpful.

<b>Ahern</b>	John Ahern, pioneering railway modeller and author.
<b>algebraic forms</b>	Variables, e.g. $x$ , $y$ , $z$ as used in equations should always be in italics, though + and - should never be in italics. Times New Roman is acceptable as a font for these terms, as sometimes they can appear odd if Verdana is used.
<b>Athearn</b>	American supplier of model railway (railroad) equipment.
<b>Alex Jackson</b>	a) The modeller who devised the Alex Jackson coupling; b) The description of a coupling built to his principles. If the meaning is clear, the expression "Alex Jacksons" is acceptable; generally abbreviated to "AJ coupling", or possibly "AJs", if that suits the informality of the context.

<b>Annett's key</b>	Two 'n's, two 't's and an apostrophe. Capitalize.
<b>auto train</b>	Two words. Refers to a push-pull train, not a Motorail car-carrier.
<b>axlebox</b>	
<b>axleguard</b>	
<b>backhead</b>	
<b>backscene</b>	
<b>back-to-back</b>	When used as an adjective has hyphens, e.g. "back-to-back gauge", but: "place back to back the items to be glued".
<b>"birdcage"</b>	Adjective for a type of brake van or coach. One word, with quotes.
<b>Blu-Tack</b>	The registered trade mark, though also marketed without the hyphen. Must have capital letters as shown.
<b>bogie</b>	Plural "bogies". To avoid ambiguity, use the word exclusively in connection with running gear, not to mean "coal wagons" unless that is appropriate to the geographical area under discussion.
<b>bolt-head</b>	
<b>Boxpok</b>	A patented form of cast steel wheel centre. Most locomotives designed by O. V. Bulleid had BFB (Bulleid Firth Brown) wheels, which were fabricated, not cast.
<b>brake</b>	"Break" is permissible only in quotations from historical documents.
<b>brakegear</b>	
<b>brake van</b>	Two words.
<b>Brook Smith</b>	Two words, no hyphen. Joe Brook Smith devised the "Brook Smith method" of track construction, using ply and rivets.
<b>buckeye</b>	
<b>buffer beam</b>	Two words. "Headstock" on wagons. "Buffer plank" is the appropriate term for the equivalent item on locomotives.
<b>buffer head</b>	Two words.
<b>buffer plank</b>	Two words. The more correct term for the buffer beam on a locomotive.
<b>buffet car</b>	
<b>bullhead</b>	
<b>busbar</b>	

<b>captions to photographs</b>	Italicize. Where, within the caption, there is a word or phrase which would normally be italicized anyway, it retains the italicized form and therefore is not distinguished from the caption text.	<b>dimensions</b>	Write as: 4ft 8in or 4' 8"; 1435mm; 6.0m. 0.035in or 0.035" or 35 thou, not .035in.
<b>chassis</b>	A term often used by modellers. For the prototype, the term is "frames".	<b>dissolve</b>	Use carefully, since solvents dissolve things, whereas heat melts them.
<b>check rail</b>	Two words.	<b>down</b>	(Of a railway line) running in a direction away from London.
<b>clerestory</b>	Not "clear-storey" (although that is how it sounds).	<b>drill</b>	Strictly speaking, the drill is the tool which holds the drill bit which actually makes the hole. But it is acceptable to write "use a 2.5mm drill to make the hole".
<b>Committee</b>	Capitalize when referring to the committee of the Scalefour Society.	<b>ducket</b>	Only one 't'.
<b>compounding of words</b>	Where two separate words have become a common term, use the single word version e.g. "airbrush"; "axlebox"; "baseboard"; "handrail". However, a hyphen may be appropriate where the two words still retain some individual meaning e.g. "bolt-head", but this is a fine point. Current usage is shown in this document, but it can change in different contexts. Consider however: "the Midland Railway six-coupled tanks" and "the Midland Railway six coupled tanks". Avoid strings of nouns e.g. not "then you resistance solder parts", but "then you join the parts by resistance soldering".	<b>eBay</b>	Upper case 'B'.
<b>continuous springy beams</b>	After first reference, abbreviate to "CSBs".	<b>Editorjames</b>	Capital 'E'; lower case 'j'. This terminology is only to be used for the Editor of Scalefour News, and is not to be used for reference to other Society officers.
<b>contractions</b>	No full stops, except Co., Co. Ltd., No. (Note: 'No.' is usually followed by a space, e.g. "Scalefour News No. 139"; or "MRJ 137".	<b>Edwardian</b>	Always has a capital letter, as do all adjectives with royal origins.
<b>copperclad</b>	Use as an adjective, e.g. "copperclad strip", not as a noun. For a noun, it is better to use the term "printed circuit board" or "pcb sleepers".	<b>electricity</b>	750V dc; 22kV; 6000kW; 5A. There is only a space between the value and the unit if the unit is spelt in full; so a 9V battery or a 9 volt battery.
<b>crankpin</b>	One word.	<b>electric multiple unit</b>	Abbreviate to "EMU". Plural "EMUs". Unit designations are 6PUL, 4SUB, etc.
<b>crosshead</b>	One word.	<b>ellipses</b>	An ellipsis is a set of three periods (. . .) indicating an omission. Each period should have a single space on either side, except when adjacent to a quotation mark, in which case there should be no space.
<b>currency</b>	Put symbol before the quantity: £47,000. Avoid GBP for the £ sign.	<b>email</b>	But: "e-shop".
<b>dates</b>	Preferred: 4th September 2004 (no superscript). Circa 1908 written as "c 1908" ('c' in italic; space; 1908). 1970s; 1980s, etc.	<b>EM Gauge Society Ltd.</b>	"EM Gauge Society" on first mention; thereafter "EMGS".
<b>decimals</b>	Use 0.1, 0.01, 0.001, etc.	<b>emphasis</b>	Use italics to emphasize a word or phrase, rather than underlining.
<b>Digital Command Control</b>	Abbreviate to "DCC", unless clearly addressing beginners or non-modellers. Capitalize when used in full.	<b>e-shop</b>	But: "email".
<b>Diagram numbers</b>	"Diagram 1379" or "D1379". Not "diagram 1379", nor "D.1379".	<b>expoEM</b>	And: "expoEM North". Italicize.
<b>diesel multiple unit</b>	Abbreviate to "DMU". Plural "DMUs".	<b>fiddleyard</b>	One word.
		<b>figure 1</b>	Lower case within the text. Capitalize within the caption.
		<b>finescale</b>	Is an adjective (as in finescale modelling). It is not a noun or adverb (so do not write: "I model finescale", or "he's into finescale"). A finescale modeller is probably a fine, scale modeller anyway.
		<b>firebox</b>	
		<b>fishplate</b>	One word.
		<b>flatbottom</b>	One word.
		<b>fogman</b>	One word. Also fogsignalman, and fogsignalling.

<b>fonts</b>	The standard for <i>Scalefour News</i> is Verdana. Arial and Tahoma are permissible. These may give trouble with numerals in technical publications, in which case Times New Roman may be used.	<b>Kadee</b>	The well-known coupling.
<b>foreign words and phrases</b>	Should generally be italicized, e.g. "verboten", though the <i>Oxford Style Manual</i> should be consulted. If there is no entry for a particular foreign word, then that word should almost definitely be italicized. See also Latin words.	<b>Kings Cross</b>	The well-known station as known by Network Rail has no apostrophe. Conversely, the London Underground station is King's Cross St. Pancras.
<b>four-foot way</b>	Use hyphen. Similarly for six-foot way, etc.	<b>Latin words and phrases</b>	Common Latin abbreviations should be written thus: e.g.; etc.; i.e. (not italicized). Similarly, common Latin words and phrases needn't be italicized. Less common Latin words and phrases should be italicized (see the <i>Oxford Style Manual</i> for guidance).
<b>fractions</b>	Use 1/10, 1/100, 1/1000, etc.	<b>layout names</b>	Italicize.
<b>frog</b>	A misnomer by modellers. Use "crossing vee" instead.	<b>lists</b>	Lists are generally indented: 5mm to bullet point or numeral; 10mm to start of text. Each item should end with a full stop when a list comprises complete sentences which do not depend on the platform statement to give them meaning. A semicolon is used when a list comprises fragments of sentences that rely on the platform statement to give them meaning. The final entry always ends with a full stop. A line space follows a list, though there is no indent to the subsequent line of text.
<b>gauge</b>	Can be a verb ("to gauge the points") or a noun ("the points were found out of gauge").	<b>load gauge</b>	Maximum permitted cross-section for rolling stock (cf. loading gauge).
<b>gauges</b>	00; 0; H0; etc. All use numerals. Not OO; O; HO; etc.	<b>loading gauge</b>	The apparatus for establishing whether a vehicle and load infringes the load gauge.
<b>goods train</b>	Generally the UK term prior to Nationalization, but there are exceptions. Post-Nationalization, "freight train" became increasingly prevalent.	<b>locomotive</b>	Preferable to "loco", though much depends on the style of the writing and the context. If "loco" is used, then "loco" and "locos", not "loco." or "loco's".
<b>Grouping</b>	Capitalized reference to the 1923 grouping of railway companies in the UK. Also "pre-Grouping" and "post-Grouping".	<b>locomotive classes</b>	Class names generally in single quotes. Always use capital 'C' for Class, then as follows, whether steam, diesel or electric: a) '43xx' Class 2-6-0; b) 'Merchant Navy' Class 4-6-2 (i.e. use quotes when a class takes its identity from a specific number series or has a descriptive class name); c) Roman numerals for locomotive classes are very rare for British prototypes. Normally use Class '5', not Class 'V'.
<b>guard's van</b>	Has apostrophe. Better to describe the vehicle more precisely, e.g. "brake van", "passenger brake van", or "brake composite coach".	<b>locomotive names</b>	Use italics, not quotation marks.
<b>handrail</b>	One word.	<b>lower-quadrant</b>	Has hyphen. Is normally an adjective (e.g. "lower-quadrant signals"). In an informal article, may be used as a noun (e.g. "lower quadrants do bounce").
<b>headcode</b>	One word.		
<b>headings</b>	Use bold, lower case. No underlining. Capitals acceptable for stylistic purposes. No italicization within headings.		
<b>hornblock</b>	This has come to be used (albeit wrongly) to mean the axlebox which slides in the hornguides. Although this usage is now common, it is nevertheless desirable that the terms 'axlebox' and 'hornguide' should be distinguished.		
<b>hornguide</b>			
<b>horsebox</b>	One word.		
<b>internet</b>	Not capitalized.		
<b>-ise or -ize?</b>	Use as indicated in the <i>OED</i> . Where there is an option, use the 'z' spelling. An excellent assessment can be found at <a href="http://www.metadyne.co.uk/ize.html">www.metadyne.co.uk/ize.html</a> (1st June 2015).		

**magazine titles** Italicize, whether using the full name or initials. Either "*Scalefour News* No. 137" or "*MRJ* 139".

**Mansell wheel** Derived from R.C. Mansell, SER carriage superintendent.

**Maunsell** R.E.C. Maunsell, the locomotive engineer.

**MEK** Methyl ethyl ketone, an industrial solvent. Not generally available in the hobby trade.

**MEK-PAK** Trademark (™). Normal to use upper case throughout.

**merry-go-round** Adjective and has hyphens. "MGR" is permissible once the full expression has been used in an article or context is clear.

**metric units and phrases** See sections 3 and 4 of this document.

**Metro-land** Has hyphen.

**mileage** Has 'e' in middle and at end.

**milepost** One word.

**model railway internet forums** Should be written as: "Scalefour Forum"; "RMweb" (lower case 'w').

**Model Railway Journal** Spell in full on first mention; thereafter "*MRJ*". Italicize both the full title and the initials. "*MRJ* No. 139" or "*MRJ* 139".

**nickel silver** Two words. NS acceptable for subsequent use.

**notes** It is convenient for the reader if notes appear in the relevant part of the main text, if the result is not too complicated. Otherwise, they should be at the end of a chapter, in font size 7, not in italics. A line separates the note from the main body of the text. Where there are many references, these should be in a list showing the title of the publication, page, author and publisher.

**numbers** Use Arabic numerals for numbers higher than twenty and for all numbers in tables. Use words for all numbers up to and including twenty, and at the start of sentences; there are, however, certain exceptions to this rule, e.g. sequences of numbers referring to dimensions, quantities, percentages, proportions, etc., and figures appearing with abbreviated forms of units or with symbols. Use a comma to show thousands in five-figure numbers and above, e.g. 1500; 47,149; 600,000. '275m' or '\$497bn' are preferred for very large numbers (especially currency).

## online

### 00

Describes a model to the scale of 4mm, but with a track gauge of 16.5mm. "00 scale" is a meaningless expression – refer instead to "00 models" or "00 standards". Note it is the numerals 00, not the upper case letters OO. Similarly H0 and 0, not HO and O.

### overbridge

One word; describes a bridge over a railway.

### paragraph numbering

Numbering can often help the author to marshal his thoughts and facts coherently, as well as assisting the reader. Where numbering is required, the first preference is for a decimal system, based on the groupings of the subject and the information on each, and progressing as follows:

#### 1. The Baseboard

- 1.1. The Legs
  - 1.1.1. Sizes of timber
  - 1.1.2. Alternatives to timber
- 1.2. The Surface
  - 1.2.1. Open framework
  - 1.2.2. Covered framework

#### 2. The Track

- 2.1. Ready-made track
  - 2.1.1. Pros
  - 2.1.2. Cons
- 2.2. Constructing track
  - 2.2.1. Ply sleepering
  - 2.2.2. Plastic sleepering

Where a secondary numbering system is needed, this may be in the form a), b), c), etc.

Note: It is well understood by editors that Word and other programs take on a life of their own with numbering systems.

### paragraphs

No blank line to precede a new paragraph. The first line of a new paragraph should be indented by 5mm.

### pcb

Printed circuit board. Generally use the abbreviation.

### Perspex

Trademark (™). A generic term is "acrylate sheet".

### pickup

When referring to electrical matters in a locomotive. Sometimes "current collection" or "current collector" may be a better term.

### pinpoint

(As in pinpoint bearing.) One word.

### plaster of Paris

Still well enough associated with the capital city to warrant a capital 'P'.

### plastics

Be careful not to use incorrect or lazy descriptions. Styrene is not the same as polystyrene; polystyrene is not the same as polyurethane. ABS is a specific plastic.

<b>plasticard</b>	The generic name for styrene sheet modelling material.	<b>re-</b>	No hyphen unless 're' is followed immediately by a vowel, and not always even then. So: "rechargeable"; "recalculate"; "re-evaluate", "reinforce", etc.
<b>Plastikard</b>	Trademark (™).	<b>ready-to-run</b>	Abbreviate to "RTR", unless clearly addressing beginners or non-modellers.
<b>plywood</b>	"Ply and rivet" method is permissible, but otherwise use the full word "plywood", not "ply".	<b>resistance soldering unit</b>	Spell in full on first mention; thereafter "RSU".
<b>P &amp; C</b>	Section of track with points and crossings.	<b>resistor</b>	Not "resister".
<b>points of the compass</b>	All one word, as "southeast"; "northwest"; etc. Not capitalized.	<b>references</b>	Tracking down inadequate references can waste a great deal of the reader's time. In the case of references to books, the author of an article ideally should try to give: the name and initials of the author of the book, full title, edition, date of publication, publisher, place of publication, and ISBN number. In the case of articles in periodicals, the reference should include author's name and initials, title of the journal, issue date or number, and pagination. Where referencing a web page please state the date on which the site was accessed.
<b>post-Grouping</b>	Capitalize 'Grouping'.	<b>retaining wall</b>	Two words.
<b>pre-Grouping</b>	Capitalize 'Grouping'.	<b>RMweb</b>	
<b>PW or PWay</b>	Refers to the Permanent Way Department or to the track itself.	<b>running-in</b>	Refers to a mechanism, or to a station sign.
<b>point rail</b>	Two words.	<b>safety valve</b>	Two words.
<b>private-owner</b>	As an adjective, has hyphen, but "private owners spent money on paint reluctantly".	<b>Scaleforum</b>	Not "Scalefourum", not ever: it's all been debated a long time ago in another forum! Not "S4um" either, unless in your own diary. Italicize.
<b>private owner wagon</b>	Or "PO wagon". Not "P O wagon", nor "P.O. wagon".	<b>Scalefour News</b>	Italicize and do not abbreviate to "S4 News". "Snooze" may be used in jocular, affectionate or conversational contexts, but not in Society publications. Specific issues of the publication should be referred to as, e.g. "Scalefour News No. 138".
<b>program</b>	If relating to computer software, otherwise "programme".	<b>Scalefour North</b>	Not "S4Nth" in publications printed by the Society. Italicize.
<b>Protofour</b>	A set of standards for wheels and track. Generally can be abbreviated to P4.	<b>Scalefour Society</b>	Do not abbreviate to "S4 Society". May be referred to as "the Society" (capitalized) in appropriate context.
<b>prototype</b>	The full-size object, practice, or company.	<b>Scalefour Southwest</b>	Italicize.
<b>publications</b>	Italicize, whether using the full name or initials. Either "Scalefour News No. 137" or "MRJ 139".	<b>Scalefour Forum</b>	Capitalize.
<b>Pullman</b>	Has capital 'P' and two 'l's.	<b>scales</b>	e.g. "4mm scale". Space is not needed between the number and the abbreviation. It is unnecessary to write "4mm : 1ft scale", unless specifically addressing non-modellers.
<b>push-and-pull</b>	Is an adjective and has hyphens. Push-pull is also acceptable.		
<b>push-button</b>	Has hyphen.		
<b>quotations</b>	Direct speech etc: use double quotation marks; for other quotations, single quotation marks desirable, but double quotations are acceptable. The distinction is a fine one, and is for editors to worry about. Single quotation marks for quotes within quotes. Never use parentheses within quotation marks.		
<b>railbus, railcar or railmotor</b>	Always one word, without a hyphen.		
<b>railway companies</b>	SR, LNWR, etc. Generally assume that readers recognize these, so there is no need to spell in full the first time, unless the company is relatively obscure. No full stop or space between letters. Note LMS is preferable to LMSR.		

<b>scratchbuild</b>	One word.	<b>truss rodding</b>	Though commonly used, this is misleading when the metal is of L-angle section. "Underframe trussing" or "trusses" is more appropriate.
<b>scrawker</b>		<b>trainload</b>	One word.
<b>sellotape</b>	Though properly a trade product, the name has now become generic, in a similar way to Hoover.	<b>train-shed</b>	Has hyphen.
<b>semi-fast</b>	Has hyphen. Normally is an adjective, but can be used as a noun (like "express").	<b>tramway</b>	One word.
<b>sideplay</b>	Side-play also acceptable.	<b>tumblehome</b>	A term from naval architecture to describe the inward curve of a ship's topsides. Commonly used however by modellers of railway carriages to describe the inward curve at the bottom of carriage sides.
<b>signal box, signal cabin</b>	Two words.	<b>turntable</b>	One word.
<b>signalman</b>	One word.	<b>underframe</b>	One word.
<b>six-foot way</b>	Has hyphen.	<b>underframe trussing</b>	See "truss rodding".
<b>slip coach</b>	Two words.	<b>underbridge</b>	A bridge which carries the railway.
<b>solebar</b>	One word.	<b>units (of mass, distance etc.)</b>	Generally if the unit is abbreviated (km; mph), then there is no space between the numeric value and the unit. But if the unit is spelt in full (volts; miles) then there is a space between the numeric value and the unit. So: 240 volts; 22km/h; 16t; 50 miles. In order to avoid the possible ugly appearance of, e.g. 1kN, the kerning may be increased between the figure and the unit.
<b>spaces</b>	No double space between sentences.	<b>up</b>	(Of a railway line) running in a direction towards London.
<b>speeds</b>	Use "mph"; "feet per second" ("ft/s"); "km/h".	<b>upper-quadrant</b>	Has hyphen. Is normally an adjective (e.g. "upper-quadrant signals"). In an informal article, may be used as a noun, in which case does not have hyphen, (e.g. "upper quadrants bounce more than lower quadrants, do they?").
<b>split-axle</b>	As in "split-axle method of collecting current", but "he uses split axles".	<b>vacuum brake, vacuum pipe</b>	Two words.
<b>stretcher bar</b>	Two words. In pointwork, holds the opposite switch rails in position.	<b>valve gear</b>	
<b>stop blocks</b>	Two words.	<b>vee</b>	As in "the vee of the points". See "frog" above.
<b>structure gauge</b>	Two words.	<b>Victorian</b>	Capitalize; same reasoning as for Edwardian above.
<b>subframe</b>	One word.	<b>wagon</b>	One 'g' unless in historical or Scottish context.
<b>sub-headings</b>	Use bold, lower case. Sub-headings within a sub-heading should be in italics.	<b>wagonload</b>	A noun and is one word.
<b>switch rail</b>	Two words.	<b>wagon-lit</b>	Has hyphen. Plural is "wagons-lit". Not italicized.
<b>tail lamp</b>	Two words.	<b>water column</b>	
<b>three-link couplings</b>	Write as "3-link couplings". With hyphen.		
<b>tie bar</b>	"Stretcher bar" is the correct term for the item that holds the opposite switch rails in a turnout in position. On plain track a tie bar holds the running rails to gauge.		
<b>times</b>	It is preferable for clarity to use the 24-hour clock, but the historical context may demand use of the 12-hour clock. For the 24-hour clock, use: 0645; 2000 (no space or punctuation).		
<b>track</b>	Trackwork tends to mean a collection of tracks or the act of laying track.		
<b>traders</b>	Generally use the trading name (or common abbreviation e.g. DJH, MSE where obvious), including "Limited" where appropriate. Alan Gibson (Workshop) is an exception, and should generally be referred to as "Alan Gibson".		

### websites

Shown all in grey font and underlined. Website addresses should start with the 'www.' and ignore the 'http://' or 'https://' part of the address. It is safe to drop the trailing slash if it's the only component after a domain name, so [www.scalefour.org/](http://www.scalefour.org/) can be written as [www.scalefour.org](http://www.scalefour.org). But the document [www.scalefour.org/wiki/csb-theory](http://www.scalefour.org/wiki/csb-theory) (with no trailing slash) will be different from [www.scalefour.org/wiki/csb-theory/](http://www.scalefour.org/wiki/csb-theory/) (with a trailing slash).

### weights

Write as "70 tons" (or "70 tonnes" if that is really what is meant). A wagon may be referred to as a "16t wagon" or a "16 ton wagon". For clarity, a ton is 2240lbs; a tonne (sometimes called a metric ton) is 1000kg.

### whitemetal

One word.

### W-iron

Capital 'W'; has hyphen.

### workbench

One word, no matter how many items are strewn over it.

### workmen's train

Not "workman's train".

### worm gear

The gear which meshes with the worm to constitute a typical model locomotive drive arrangement.

### wormwheel

One word.

## 3. Commonly used metric system units and symbols

Quantity measured	Unit	Symbol	Relationship
Length, width, distance, thickness, girth, etc.	millimetre	mm	10mm = 1cm
	centimetre	cm	100cm = 1m
	metre	m	
	kilometre	km	1km = 1000m
Mass	milligram	mg	1000mg = 1g
	gram	g	
	kilogram	kg	1kg = 1000g
	metric ton (tonne)	t	1t = 1000kg
Time	second	s	
Temperature	degree Celsius	°C	
Area	square metre	m <sup>2</sup>	
	hectare	ha	1ha = 10,000m <sup>2</sup>
	square kilometre	km <sup>2</sup>	1km <sup>2</sup> = 100 ha
Volume	millilitre	mL	1000mL = 1L
	cubic centimetre	cm <sup>3</sup>	1cm <sup>3</sup> = 1mL
	litre	L	1000L = 1m <sup>3</sup>
	cubic metre	m <sup>3</sup>	
Speed, velocity	metre per second	m/s	
	kilometre per hour	km/h	1km/h = 0.278m/s
Density	kilogram per cubic metre	kg/m <sup>3</sup>	
Force	newton	N	
Pressure, stress	kilopascal	kPa	
Power	watt	W	
	kilowatt	kW	1kW = 1000W
Energy	kilojoule	kJ	
	megajoule	MJ	1MJ = 1000kJ
	kilowatt hour	kWh	1kWh = 3.6MJ
Electric current and voltage	ampere	A	
	voltage	V	

#### 4. Commonly used metric prefixes

Prefix	Symbol	Factor	Numerically	Name
giga	G	$10^9$	1,000,000,000	billion
mega	M	$10^6$	1,000,000	million
kilo	k	$10^3$	1000	thousand
milli	m	$10^{-3}$	0.001	thousandth
micro	$\mu$	$10^{-6}$	0.000,001	millionth
nano	n	$10^{-9}$	0.000,000,001	billionth

#### 5. Commonly used imperial system units and symbols

Unit	Symbol	Note
thou	thou	1 thou equals 0.001in
inch	in	" is also acceptable
foot	ft	' is also acceptable
yard	yd	
mile	m or mile	Ensure no confusion with metre
ounce	oz	16oz equals 1lb
pound	lb	
quarter	qtr	4qtr equals 1cwt
hundredweight	cwt	20cwt equals 1t
ton	t	1t equals 2240lb

There is no need to add an 's' to any unit symbol; so 168lb, not 168lbs.