

***Factsheet:* SI Unit Prefixes**

The SI unit prefixes are used in science to help with scaling large and small numbers. They help to reduce the number of digits required to write a number. You should familiarise yourself with the prefixes that are most common within your particular area of study. Many errors in scientific/medical calculations come from incorrect conversions between prefixes.

SYMBOL	PREFIX	FACTOR	AS AN EXPLICIT NUMBER
Y	yotta-	1×10^{24}	1 000 000 000 000 000 000 000 000
Z	zetta-	1×10^{21}	1 000 000 000 000 000 000 000
E	exa-	1×10^{18}	1 000 000 000 000 000 000
P	peta-	1×10^{15}	1 000 000 000 000 000
T	tera-	1×10^{12}	1 000 000 000 000
G	giga-	1×10^9	1 000 000 000
M	mega-	1×10^6	1 000 000
k	kilo-	1×10^3	1 000
h	hecto-	1×10^2	100
da	deca-	1×10^1	10
d	deci-	1×10^{-1}	0.1
c	centi-	1×10^{-2}	0.01
m	milli-	1×10^{-3}	0.001
μ or mc	micro-	1×10^{-6}	0.000 001
n	nano-	1×10^{-9}	0.000 000 001
p	pico-	1×10^{-12}	0.000 000 000 001
f	femto-	1×10^{-15}	0.000 000 000 000 001
a	atto-	1×10^{-18}	0.000 000 000 000 000 001
z	zepto-	1×10^{-21}	0.000 000 000 000 000 000 001
y	yocto-	1×10^{-24}	0.000 000 000 000 000 000 000 001

Want to know more?

If you have any further questions about this topic you can make an appointment to see a **Learning Enhancement Tutor** in the **Student Support Service**, as well as speaking to your lecturer or adviser.

- 📞 Call: 01603 592761
- 💻 Ask: ask.let@uea.ac.uk
- 🖱️ Click: <https://portal.uea.ac.uk/student-support-service/learning-enhancement>

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Your comments or suggestions about our resources are very welcome.



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