

1 Sample

1.1 Bacteria

This section is about **bacteria**.

1.1.1 First Use

Clostridium botulinum, *Pseudomonas putida*, *Clostridium perfringens*, *Bacillus subtilis*, *Clostridium tetani*, *Planifilum composti*, *Planifilum fimeticola*, *Coxiella burnetii*, *Rickettsia australis*, *Rickettsia rickettsii*.

1.1.2 Next Use

C. botulinum, *P. putida*, *C. perfringens*, *B. subtilis*, *C. tetani*, *P. composti*, *P. fimeticola*, *C. burnetii*, *R. australis*, *R. rickettsii*.

1.2 Markup Languages

This section is about **markup languages**.

1.2.1 First Use

\LaTeX , markdown, extensible hypertext markup language (XHTML), mathematical markup language (MathML), scalable vector graphics (SVG).

1.2.2 Next Use

\LaTeX , markdown, XHTML, MathML, SVG.

1.3 Vegetables

This section is about **vegetables**. Cabbage, Brussels sprout, artichoke, cauliflower, courgette, spinach.

1.4 Minerals

This section is about **minerals**. Beryl, amethyst, chalcedony, aquamarine, aragonite, calcite, bñlinite, cyanotrichite, biotite, dolomite, quetzalcoatlite, vulcanite.

1.5 Animals

This section is about **animals**. Duck, parrot, hedgehog, sea lion, zander, aardvark, zebra, swan, armadillo.

1.6 Chemicals

This section is about **chemical formulae**. $\text{Al}_2(\text{SO}_4)_3$ (aluminium sulfate), H_2O (water), $\text{C}_6\text{H}_{12}\text{O}_6$ (glucose), $\text{CH}_3\text{CH}_2\text{OH}$ (ethanol), CH_2O (formaldehyde), OF_2 (oxygen difluoride), O_2F_2 (dioxygen difluoride), SO_4^{2-} (sulfate), H_3O^+ (hydronium), OH^- (hydroxide ion), O_2 (dioxygen), AlF_3 (aluminium trifluoride), O (oxygen), Al_2CoO_4 (cobalt blue), As_4S_4 (tetraarsenic tetrasulfide), $\text{C}_{10}\text{H}_{10}\text{O}_4$ (ferulic acid), $\text{C}_5\text{H}_4\text{NCOOH}$ (niacin), $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$ ($\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$), SO_2 (sulfur dioxide), $\text{S}_2\text{O}_7^{2-}$ ($\text{S}_2\text{O}_7^{2-}$), SbBr_3 (antimony(III) bromide), Sc_2O_3 (scandium oxide), $\text{Zr}_3(\text{PO}_4)_4$ (zirconium phosphate), ZnF_2 (zinc fluoride).

1.7 SI Units

Base SI units: A (measures electric current), kg (measures mass), m, s, K, mol, cd.

Derived SI units: m^2 , m^3 , m s^{-1} , m s^{-2} , A m^{-2} , cd m^{-2} , $\text{m}^3 \text{kg}^{-1}$, mol m^{-3} , m^{-1} .

1.8 Books and Films

Books: *A Tale of Two Cities* (by Charles Dickens), *The Big Sleep* (by Raymond Chandler, film adaptation: *The Big Sleep*), *Ice Cold in Alex* (by Christopher Landon, film adaptation: *Ice Cold in Alex*), *Why Didn't They Ask Evans?* (by Agatha Christie (Lady Mallowan), film adaptation: *Why Didn't They Ask Evans?*), *Do Androids Dream of Electric Sheep?* (by Philip K. Dick, inspired the film *Blade Runner*).

Films: *The Hobbit: An Unexpected Journey*, *The Hobbit: The Desolation of Smaug* and *The Hobbit: The Battle of Five Armies* (adapted from the book *The Hobbit* by J.R.R. Tolkien), *The Lord of the Rings: The Fellowship of the Ring*, *The Lord of the Rings: The Two Towers* and *The Lord of the Rings: The Return of the King* (adapted from the book *The Lord of the Rings* also by Tolkien).

1.9 Miscellaneous Symbols

1.9.1 First Use

Media controls: ▶ (play), ▶▶ (next track), ◀◀ (back to start of track), ◀ (rewind).

Information: 🚲 (bicycle route), ☕ (café), ⓘ (information centre), ♀ (Gents), ♀ (Ladies), ♿ (wheelchair access provided), ⚽ (football stadium), ♻️ (recycling centre).

Weather: ☁ (cloudy), 🌫 (foggy), 🌧 (hail), ☀ (sunny), ⚡ (thunderstorm).

1.9.2 Next Use

Media controls: ▶, ▶▶, ◀◀, ◀.

Information: 🚲, ☕, 🏠, 👤, 👤, 🏏, ⚽.

Weather: ☁, 🌧, 🌸, ☀, ⚡.

1.10 Measurements

Measurements: electric current, area, length.

2 Glossaries

Bacteria

B. subtilis *Bacillus subtilis*.

C. botulinum *Clostridium botulinum*.

C. burnetii *Coxiella burnetii*.

C. perfringens *Clostridium perfringens*.

C. tetani *Clostridium tetani*.

P. composti *Planifilum composti*.

P. fimeticola *Planifilum fimeticola*.

P. putida *Pseudomonas putida*.

R. australis *Rickettsia australis*.

R. rickettsii *Rickettsia rickettsii*.

Markup Languages

HTML (hypertext markup language)

The standard markup language for creating web pages.

L^AT_EX

A format of T_EX designed to separate content from style.

markdown

A lightweight markup language with plain text formatting syntax.

MathML (mathematical markup language)

The standard markup language for creating web pages.

SVG (scalable vector graphics)

XML-based vector image format.

T_EX

A format for describing complex type and page layout often used for mathematics, technical, and academic publications.

XHTML (extensible hypertext markup language)

XML version of HTML.

XML (extensible markup language)

A markup language that defines a set of rules for encoding documents.

Vegetables

artichoke a variety of thistle cultivated as food.

Brussels sprout small leafy green vegetable buds.

cabbage vegetable with thick green or purple leaves.

cauliflower type of cabbage with edible white flower head.

courgette immature fruit of a vegetable **marrow**.

marrow long white-fleshed gourd with green skin.

spinach green, leafy vegetable.

Minerals

A

amethyst purple variety of **quartz**.

aquamarine light blue variety of **beryl**.

aragonite a crystal form of calcium carbonate.

B

beryl composed of beryllium aluminium cyclosilicate.

bilinite an iron sulfate mineral.

biotite a common phyllosilicate mineral.

C

calcite a crystal form of calcium carbonate.

chalcedony cryptocrystalline variety of **quartz**.

cyanotrichite a hydrous copper aluminium sulfate mineral.

D

dolomite an anhydrous carbonate mineral.

Q

quartz hard mineral consisting of silica.

quetzalcoatlite a rare tellurium oxysalt mineral.

V

vulcanite a rare copper telluride mineral.

Animals

aardvark nocturnal African burrowing mammal.

armadillo nocturnal insectivore with large claws.

duck a waterbird with webbed feet.

hedgehog small nocturnal mammal with a spiny coat and short legs.

parrot mainly tropical bird with bright plumage.

sea lion a large type of **seal**.

seal sea-dwelling fish-eating mammal with flippers.

swan a large waterbird with a long flexible neck, short legs, webbed feet and a broad bill.

zander large freshwater perch.

zebra wild African horse with black-and-white stripes.

People

Raymond Chandler American-British novelist and screenwriter (23rd July 1888–26th March 1959).

Dame Agatha Mary Clarissa Christie (Lady Mallowan) English crime novelist and playwright (15th September 1890–12th January 1976).

Philip K. Dick American science fiction writer (16th December 1928–2nd March 1982).

Charles Dickens English writer and social critic (7th February 1812–9th June 1870).

Christopher Guy Landon British novelist and screenwriter (29th March 1911–26th April 1961).

John Ronald Reuel Tolkien English writer, poet, philologist, and university professor (3rd January 1892–2nd September 1973).

Books

The Big Sleep novel by Raymond Chandler.

Do Androids Dream of Electric Sheep? novel by Philip K. Dick.

The Hobbit novel by J.R.R. Tolkien.

Ice Cold in Alex novel by Christopher Landon.

The Lord of the Rings novel by J.R.R. Tolkien.

A Tale of Two Cities novel by Charles Dickens.

Why Didn't They Ask Evans? novel by Agatha Christie.

Films

The Big Sleep A film based on the novel *The Big Sleep* (released 1946) featuring Humphrey Bogart & Lauren Bacall.

Blade Runner A film loosely based on the novel *Do Androids Dream of Electric Sheep?* (released 1982) featuring Harrison Ford, Rutger Hauer & Sean Young.

The Hobbit: The Battle of Five Armies A film based on the novel *The Hobbit* (released 2014) featuring Ian McKellen, Martin Freeman & Richard Armitage.

The Hobbit: The Desolation of Smaug A film based on the novel *The Hobbit* (released 2013) featuring Ian McKellen, Martin Freeman & Richard Armitage.

The Hobbit: An Unexpected Journey A film based on the novel *The Hobbit* (released 2012) featuring Martin Freeman, Ian McKellen & Richard Armitage.

Ice Cold in Alex A film based on the novel *Ice Cold in Alex* (released 1958) featuring John Mills, Anthony Quayle & Sylvia Sims.

The Lord of the Rings: The Fellowship of the Ring A film based on the novel *The Lord of the Rings* (released 2001) featuring Elijah Wood, Ian McKellen & Orlando Bloom.

The Lord of the Rings: The Return of the King A film based on the novel *The Lord of the Rings* (released 2003) featuring Elijah Wood, Viggo Mortensen & Ian McKellen.

The Lord of the Rings: The Two Towers A film based on the novel *The Lord of the Rings* (released 2002) featuring Elijah Wood, Ian McKellen & Viggo Mortensen.

Why Didn't They Ask Evans? A film based on the novel *Why Didn't They Ask Evans?* (released 1980) featuring Francesca Annis, John Gielgud & Bernard Miles.

Chemical Formula

A

AlF ₃	aluminium trifluoride.
Al ₂ (SO ₄) ₃	aluminium sulfate.
Al ₂ CoO ₄	cobalt blue.
As ₄ S ₄	tetraarsenic tetrasulfide.

C

CH ₂ O	formaldehyde.
CH ₃ CH ₂ OH	ethanol.
C ₅ H ₄ NCOOH	niacin.
C ₆ H ₁₂ O ₆	glucose.
C ₈ H ₁₀ N ₄ O ₂	caffeine.
C ₁₀ H ₁₀ O ₄	ferulic acid.

H

H ₂ O	water.
H ₃ O ⁺	hydronium.

O

O	oxygen.
OF ₂	oxygen difluoride.
OH ⁻	hydroxide ion.
O ₂	dioxygen.
O ₂ F ₂	dioxygen difluoride.

S

SO ₂	sulfur dioxide.
SO ₄ ²⁻	sulfate.
S ₂ O ₇ ²⁻	disulfate ion.
SbBr ₃	antimony(III) bromide.
Sc ₂ O ₃	scandium oxide.

Z

ZnF ₂	zinc fluoride.
Zr ₃ (PO ₄) ₄	zirconium phosphate.









Measurements

acceleration	metre per second squared (m s^{-2}).
amount of substance	mole (mol).
area	square metre (m^2).
concentration	mole per cubic metre (mol m^{-3}).
density	ampere per square metre (A m^{-2}).
electric current	ampere (A).
length	metre (m).
luminance	candela per square metre (cd m^{-2}).
luminous intensity	candela (cd).
mass	kilogram (kg).
specific volume	cubic metre per kilogram ($\text{m}^3 \text{kg}^{-1}$).
thermodynamic temperature	kelvin (K).
time	second (s).
velocity	metre per second (m s^{-1}).
volume	cubic metre (m^3).
wave number	per metre (m^{-1}).

SI Units

A	ampere.
cd	candela.
K	kelvin.
kg	kilogram.
m	metre.
mol	mole.
s	second.

Information Symbols

	bicycle route.
	café.
	football stadium.
	Gents.
	information centre.
	Ladies.
	recycling centre.
	wheelchair access provided.

Media Control Symbols

⏮ back to start of track.

⏭ next track.

▶ play.

◀ rewind.

Weather Symbols

☁ cloudy.

🌫 foggy.

⚡ hail.

☀ sunny.

⚡ thunderstorm.

Index

Symbols

⏮ (back to start of track), 2, 3, 9
🚲 (bicycle route), 2, 3, 8
☕ (café), 2, 3, 8
☁ (cloudy), 2, 3, 9
🌫 (foggy), 2, 3, 9
⚽ (football stadium), 2, 3, 8
♂ (Gents), 2, 3, 8
⚧ (hail), 2, 3, 9
ℹ (information centre), 2, 3, 8
♀ (Ladies), 2, 3, 8
▶▶ (next track), 2, 3, 9
▶ (play), 2, 3, 9
♻ (recycling centre), 2, 8
◀ (rewind), 2, 3, 9
☀ (sunny), 2, 3, 9
⚡ (thunderstorm), 2, 3, 9
♿ (wheelchair access provided), 2, 3, 8

A

aardvark, 2, 6
acceleration (m s^{-2}), 2, 8
aluminium sulfate, $\text{Al}_2(\text{SO}_4)_3$, 2, 7
aluminium trifluoride, AlF_3 , 2, 7
amethyst, 1, 5
amount of substance (mol), 2, 8
ampere (A), 2, 3, 8
animal, 2
antimony(III) bromide, SbBr_3 , 2, 7
aquamarine, 1, 5
aragonite, 1, 5
area (m^2), 2, 3, 8
armadillo, 2, 6
artichoke, 1, 5

B

Bacillus subtilis, 1, 4
back to start of track (⏮), 2, 3, 9
bacteria, 1
base SI unit, 2
beryl, 1, 5
bicycle route (🚲), 2, 3, 8
The Big Sleep, 2, 6, 7
The Big Sleep (film), 2, 7
bilitite, 1, 5
biotite, 1, 5
Blade Runner (film), 2, 7
book, 2
Brussels sprout, 1, 5

C

cabbage, 1, 5
café (☕), 2, 3, 8
caffeine, $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$, 2, 7
calcite, 1, 5
candela (cd), 2, 8
cauliflower, 1, 5
chalcedony, 1, 5
Chandler, Raymond, 2, 6
chemical formula, 2
Christie, Agatha, 2, 6
Clostridium botulinum, 1, 4
Clostridium perfringens, 1, 4
Clostridium tetani, 1, 4
cloudy (☁), 2, 3, 9
cobalt blue, Al_2CoO_4 , 2, 7
concentration (mol m^{-3}), 2, 8
courgette, 1, 5
Coxiella burnetii, 1, 4
cyanotrichite, 1, 5

D

density (A m^{-2}), 2, 8
derived SI unit, 2
Dick, Philip K., 2, 6
Dickens, Charles, 2, 6
dioxygen, O_2 , 2, 7
dioxygen difluoride, O_2F_2 , 2, 7
disulfate ion, $\text{S}_2\text{O}_7^{2-}$, 2, 7
Do Androids Dream of Electric Sheep?, 2, 6, 7
dolomite, 1, 5
duck, 2, 6

E

electric current (A), 2, 3, 8
ethanol, $\text{CH}_3\text{CH}_2\text{OH}$, 2, 7
extensible hypertext markup language (XHTML), 1, 4
extensible markup language (XML), 4

F

ferulic acid, $\text{C}_{10}\text{H}_{10}\text{O}_4$, 2, 7
film, 2
foggy (☁), 2, 3, 9
football stadium (⚽), 2, 3, 8
formaldehyde, CH_2O , 2, 7

G

Gents (♠), 2, 3, 8
glucose, $\text{C}_6\text{H}_{12}\text{O}_6$, 2, 7

H

hail (⚡), 2, 3, 9
hedgehog, 2, 6
The Hobbit, 2, 6, 7
The Hobbit: The Battle of Five Armies (film), 2, 7
The Hobbit: The Desolation of Smaug (film), 2, 7
The Hobbit: An Unexpected Journey (film), 2, 7

hydronium, H_3O^+ , 2, 7
hydroxide ion, OH^- , 2, 7
hypertext markup language (HTML), 4

I

Ice Cold in Alex, 2, 6, 7
Ice Cold in Alex (film), 2, 7
information, 2, 3
information centre (ℹ), 2, 3, 8

K

kelvin (K), 2, 8
kilogram (kg), 2, 8

L

Ladies (♠), 2, 3, 8
Landon, Christopher, 2, 6
L^AT_EX, 1, 4
length (m), 2, 3, 8
lettsomite, *see* cyanotrichite
The Lord of the Rings, 2, 6, 7
The Lord of the Rings: The Fellowship of the Ring (film), 2, 7
The Lord of the Rings: The Return of the King (film), 2, 7
The Lord of the Rings: The Two Towers (film), 2, 7
luminance (cd m^{-2}), 2, 8
luminous intensity (cd), 2, 8

M

markdown, 1, 4
markup language, 1
marrow, 5
mass (kg), 2, 8
mathematical markup language (MathML), 1, 4
measurement, 3
media control, 2, 3
metre (m), 2, 3, 8
mineral, 1
mole (mol), 2, 8

N

next track (▶▶), 2, 3, 9
niacin, C₅H₄NCOOH, 2, 7

O

oxygen, O, 2, 7
oxygen difluoride, OF₂, 2, 7

P

parrot, 2, 6
Planifilum composti, 1, 4
Planifilum fimeticola, 1, 4
play (▶), 2, 3, 9
Pseudomonas putida, 1, 4

Q

quartz, 5
quetzalcoatlite, 1, 5

R

recycling centre (♻), 2, 8
rewind (◀), 2, 3, 9
Rickettsia australis, 1, 4
Rickettsia rickettsii, 1, 4

S

scalable vector graphics (SVG), 1, 4
scandium oxide, Sc₂O₃, 2, 7
sea lion, 2, 6
seal, 6
second (s), 2, 8
specific volume (m³ kg⁻¹), 2, 8
spinach, 1, 5

sulfate, SO₄²⁻, 2, 7
sulfur dioxide, SO₂, 2, 7
sunny (☀), 2, 3, 9
swan, 2, 6

T

A Tale of Two Cities, 2, 6
tetraarsenic tetrasulfide, As₄S₄, 2, 7
T_EX, 4
thermodynamic temperature (K), 2, 8
thunderstorm (⚡), 2, 3, 9
time (s), 2, 8
Tolkien, J.R.R., 2, 6

V

vegetable, 1
velocity (m s⁻¹), 2, 8
volume (m³), 2, 8
vulcanite, 1, 5

W

water, H₂O, 2, 7
wave number (m⁻¹), 2, 8
weather, 2, 3
wheelchair access provided (♿), 2, 3, 8
Why Didn't They Ask Evans?, 2, 6, 7
Why Didn't They Ask Evans? (film), 2, 7

Z

zander, 2, 6
zebra, 2, 6
zinc fluoride, ZnF₂, 2, 7
zirconium phosphate, Zr₃(PO₄)₄, 2, 7
zucchini, *see* courgette