LATEX How To

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1 Introduction

This is the introduction.

2 Document Structure Example

2.1 Stage 1

demo 1

2.2 results

This is how you make a reference to a label that you created. Using the code from 2.1 on page 1.

3 Typesetting Text

3.1 Font Effects

text in italics
slanted text
SMALLCAPS
words in bold
words in teletype
sans serif
roman words
underlines words

3.2 Colored Text

Colored text can be used by using the \usepackage{color} package.

This is an example or writing the word fire in the color red. The following colors are recognized by the package: red, blue, cyan, yellow, green, magenta, black, white.

More information on color is in the LATEX workbook.

3.3 Font Sizes

Font Size Examples:

words LARGE words huge words large words Large

3.4 Lists

Example of a list:

- 1. First thing
- 2. Second thing
 - A sub-thing
 - Another sub-thing
- 3. Third thing

The bullet format can be changed by using $\left| \text{item}[x] \right|$ where x is the bullet character.

3.5 Comments & Spacing

There is a comment in this line, but not in this one.

3.6 Special Characters

Item $\#1A\642$ costs \$8 & is sold at a ~10% profit.

4 Tables

This is a demonstration of how to make some tables:

Item	Quantity	Price (\$)
Nails	500	0.34
Wooden boards	100	4.00
Bricks	240	11.50

	Year						
City	2006	2007	2008				
London	45789	46551	51298				
Berlin	34549	32543	29870				
Paris	49835	51009	51970				

Table 1:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
ïNADPH_conc	12	0.002	0.003	0	0.000	0.001	0
$rate_min$	12	79.934	42.827	0	58.0	104.6	133
rate_sec	12	1.332	0.714	0	1.0	1.7	2
kcat	12	0.181	0.097	0	0.1	0.2	0

Table 2:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
rating	30	64.633	12.173	40	58.8	71.8	85
complaints	30	66.600	13.315	37	58.5	77	90
privileges	30	53.133	12.235	30	45	62.5	83
learning	30	56.367	11.737	34	47	66.8	75
raises	30	64.633	10.397	43	58.2	71	88
critical	30	74.767	9.895	49	69.2	80	92
advance	30	42.933	10.289	25	35	47.8	72

5 Figures

6 Equations

6.1 Inserting Equations

Math mode is accessed bracketing text with \$s. Use two \$s to get the equation onto its own line.

$$1 + 2 = 3$$

Labeled Equation:

$$1 + 2 = 3 \tag{1}$$

Table 3: Oxygraph Table of Data

ïNADPH_conc	rate_min	rate_sec	kcat	X	X.1	X.2
0	0	0	0			
0.00001	22.700	0.378	0.051			
0.00002	27.090	0.452	0.061			
0.00004	68.320	1.139	0.155			
0.0001	78.150	1.302	0.177			
0.0001	89.500	1.492	0.202			
0.0003	97.190	1.620	0.220			
0.001	99.260	1.654	0.224			
0.001	101.800	1.697	0.230			
0.002	112.900	1.882	0.255			
0.005	129.400	2.157	0.293			
0.009	132.900	2.215	0.301			

Collected Data using an Hanstech oxygraph probe to determine inital rate values for a variety of NADPH concentrations.

Equation Array:

$$a = b + c (2)$$

$$= y - z \tag{3}$$

6.2 Mathematical Symbols

Superscript and Subscript:

 n^2

 n_2

 b_{a-2}

Fractions: $\frac{numerator}{denominator}$ Fractions can be nested

Roots: $\sqrt[index]{expression}$

Summations and Integrals:

$$\sum_{x=1}^{5} 2^x$$

$$\int_{a}^{b} f(x)dx$$

6.3 Examples

$$e = mc^2 (4)$$

$$\pi = \frac{c}{d} \tag{5}$$

$$\frac{d}{dx}e^x = e^x \tag{6}$$

$$f(x) = \sum_{i} = 0^{\infty} \frac{f^{(i)}(0)}{i!} x^{i}$$
 (7)

$$x = \sqrt{\frac{x_i}{z}y} \tag{8}$$

7 Inserting References