

## UNIT 1 *Indices*

## Overhead Slides

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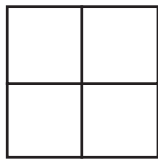
### **Overhead Slides**

- 1.1 Square, Cube, Square Roots, Cube Roots
- 1.2 Time Scale
- 1.3 Space Scale
- 1.4 Multiples

**OS 1.1***Squares, Cubes, Square Roots, Cube Roots***1**

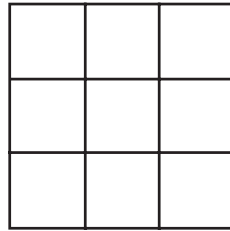
$(1 \times 1)$

$1^2$

**4**

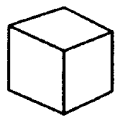
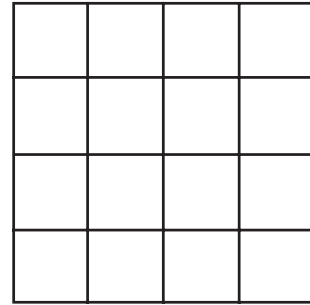
$(2 \times 2)$

$2^2$

**9**

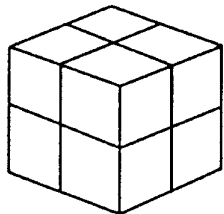
$(3 \times 3)$

$3^2$

**1**

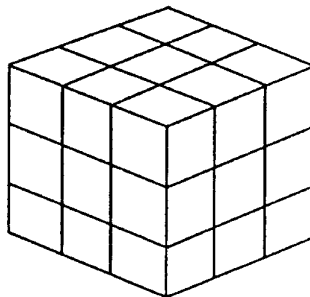
$(1 \times 1 \times 1)$

$1^3$

**8**

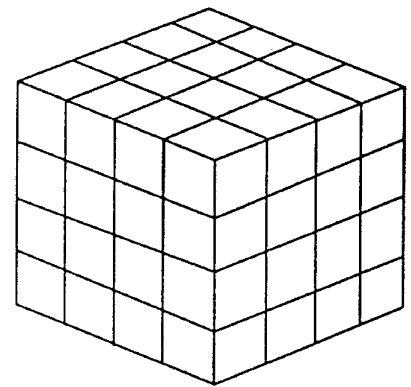
$(2 \times 2 \times 2)$

$2^3$

**27**

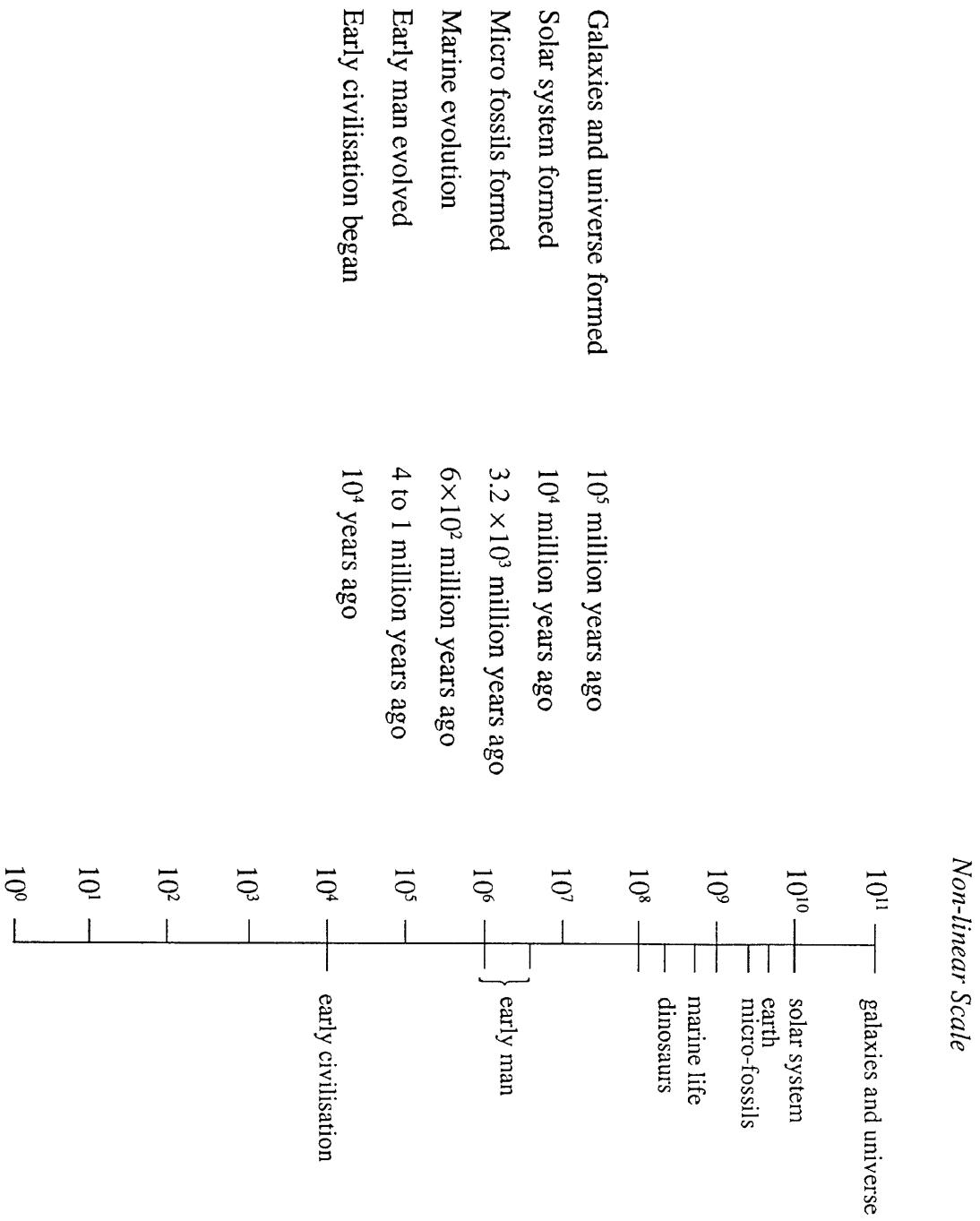
$(3 \times 3 \times 3)$

$3^3$



# OS 1.2

## Time Scale



## OS 1.3

*Space Scale*

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Radius of visible universe	$10^{23}$ km
Distance of nearest galaxy	$10^{19}$ km
Distance of nearest star	$10^{14}$ km
Distance of sun	$1.5 \times 10^8$ km
Distance of moon	$4.0 \times 10^5$ km
Highest mountains on earth	8.8 km
Human dimensions	2 m
Atomic radius	$10^{-8}$ km
Nuclear radius	$10^{-13}$ km

**OS 1.4***Multiples*

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<b>Prefix</b>	<b>Abbreviation</b>	<b>Multiple</b>
mega	M	$10^6$
kilo	k	$10^3$
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deci	d	$10^{-1}$
centi	c	$10^{-2}$
milli	m	$10^{-3}$
micro	$\mu$	$10^{-6}$
nano	n	$10^{-9}$