##### DATA FOR PHYSICAL SCIENCES P1 GRADE 12

***GEGEWENS VIR FISIESE WETENSKAPPE V1 GRAAD 12***

TABLE 1: PHYSICAL CONSTANTS/*TABEL 1: FISIESE KONSTANTES*

|  |  |  |
| --- | --- | --- |
| NAME*/NAAM* | SYMBOL*/SIMBOOL* | VALUE/*WAARDE* |
| Acceleration due to gravity  *Swaartekragversnelling* | g | 9,8 m·s-2 |
| Speed of light in a vacuum  *Spoed van lig in 'n vakuum* | c | 3,0 x 108 m·s-1 |
| Planck's constant  *Planck se konstante* | h | 6,63 x 10-34 J·s |
| Gravitational constant  *Swaartekragkonstante* | G | 6,67 x 10-11 N·m2·kg-2 |
| Coulomb's constant  *Coulomb se konstante* | k | 9,0 x 109 N·m2·C-2 |
| Charge on electron  *Lading op elektron* | e- | -1,6 x 10-19 C |
| Electron mass  *Elektronmassa* | me | 9,11 x 10-31 kg |
| Permittivity of free space  *Permittiwiteit van vry ruimte* |  | 8,85 x 10-12 F·m-1 |
| Permeability of free space  *Permeabiliteit van vry ruimte* |  | 4 x 10-7 T·m·A-1 |

**TABLE 2: FORMULAE/*TABEL 2: FORMULES***

**MOTION/*BEWEGING***

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| --- | --- |
|  | or/*of* |
| or/*of* | or/*of* |

**FORCE/*KRAG***

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**WORK, ENERGY AND POWER/*ARBEID,* *ENERGIE EN DRYWING***

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# WAVES, LIGHT AND SOUND/*GOLWE, LIG EN KLANK*

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| --- | --- |
| or/*of* | or/*of* |
|  | or/*of*  or/*of* |
|  | sin |
|  |  |

**MATTER AND MATERIALS/*MATERIE EN MATERIALE***

|  |  |
| --- | --- |
|  | Stress/*Spanning* |
| Strain/*Vervorming* |  |

**ELECTRICITY AND MAGNETISM/*ELEKTRISITEIT EN MAGNETISME***

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| and/*en* |  |
| = BA |  |

**ELECTROSTATICS/*ELEKTROSTATIKA***

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| C = | C = |

**ELECTRIC CIRCUITS/*ELEKTRIESE STROOMBANE***

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