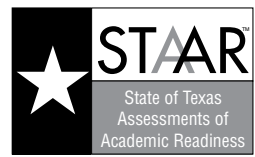


STAAR GRADE 8 SCIENCE REFERENCE MATERIALS



FORMULAS

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

$$D = \frac{m}{V}$$

$$\text{Average speed} = \frac{\text{total distance}}{\text{total time}}$$

$$s = \frac{d}{t}$$

$$\text{Net force} = (\text{mass})(\text{acceleration})$$

$$F = ma$$

$$\text{Work} = (\text{force})(\text{distance})$$

$$W = Fd$$

STAAR GRADE 8 SCIENCE REFERENCE MATERIALS

PERIODIC TABLE OF THE ELEMENTS

																		Atomic number — 14																					
																		Si																					
																		28.086																					
																		Silicon		Name																			
																		8		9		10		11		12		13		14		15		16		17		18	
																		8B		9B		10		11B		12B		13A		14A		5A		6A		7A		8A	
																		27		26		28		29		30		31		32		33		34		35		36	
																		Co		Fe		Ni		Cu		Zn		Ga		Ge		As		Se		Br		Kr	
																		58.933		55.845		58.933		63.546		65.38		69.723		72.64		74.922		78.96		79.904		83.798	
																		Cobalt		Iron		Nickel		Copper		Zinc		Gallium		Germanium		Arsenic		Selenium		Bromine		Krypton	
																		45		44		46		47		48		49		50		51		52		53		54	
																		Rh		Ru		Pd		Ag		Cd		In		Sn		Sb		Te		I		Xe	
																		102.906		101.07		106.42		107.868		112.412		114.818		118.711		121.760		127.60		126.904		131.294	
																		Rhodium		Ruthenium		Palladium		Silver		Cadmium		Indium		Tin		Antimony		Tellurium		Iodine		Xenon	
																		77		76		78		79		80		81		82		83		84		85		86	
																		Ir		Os		Pt		Au		Hg		Tl		Pb		Bi		Po		At		Rn	
																		192.217		190.23		195.085		196.967		200.59		204.383		207.2		208.980		(209)		(210)		(222)	
																		Iridium		Osmium		Platinum		Gold		Mercury		Thallium		Lead		Bismuth		Polonium		Astatine		Radon	
																		109		108		110		111		Mass numbers in parentheses are those of the most stable or most common isotope.													
																		Mt		Hs		Ds		Rg															
																		Meitnerium		Hassium		Darmstadtium		Roentgenium															
																		(276)		(270)		(281)		(280)															
																		62		61		63		64		65		66		67		68		69		70			
																		Sm		Pm		Eu		Gd		Tb		Dy		Ho		Er		Tm		Yb			
																		150.36		(145)		151.964		157.25		158.925		162.500		164.930		167.259		168.934		173.055			
																		Samarium		Promethium		Europium		Gadolinium		Terbium		Dysprosium		Holmium		Erbium		Thulium		Ytterbium			
																		94		93		95		96		97		98		99		100		101		102			
																		Pu		Np		Am		Cm		Bk		Cf		Es		Fm		Md		No			
																		(244)		(237)		(243)		(247)		(247)		(251)		(252)		(257)		(258)		(259)			
																		Plutonium		Neptunium		Americium		Curium		Berkelium		Californium		Einsteinium		Fermium		Mendelevium		Nobelium			
																		60		59		58		57		Lanthanide Series													
																		Nd		Pr		Ce		La															
																		144.242		140.908		140.116		138.905															
																		Neodymium		Praseodymium		Cerium		Lanthanum															
																		92		91		90		89		Actinide Series													
																		U		Pa		Th		Ac															
																		238.029		231.036		232.038		(227)															
																		Uranium		Protactinium		Thorium		Actinium															