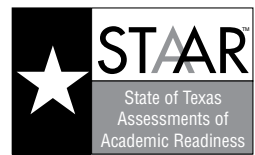


STAAR GRADE 8 SCIENCE REFERENCE MATERIALS



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

																		18 8A	
																		2	
																		He	
																		4.003 Helium	
																		17	
																		7A	
																		9	
																		F	
																		18.998 Fluorine	
																		8	
																		O	
																		15.999 Oxygen	
																		16	
																		S	
																		32.066 Sulfur	
																		17	
																		Cl	
																		35.453 Chlorine	
																		18	
																		Ar	
																		39.948 Argon	
																		36	
																		Kr	
																		83.798 Krypton	
																		54	
																		Xe	
																		131.294 Xenon	
																		85	
																		At	
																		(210) Astatine	
																		84	
																		Po	
																		(209) Polonium	
																		83	
																		Bi	
																		208.980 Bismuth	
																		82	
																		Pb	
																		207.2 Lead	
																		81	
																		Tl	
																		204.383 Thallium	
																		80	
																		Hg	
																		200.59 Mercury	
																		79	
																		Au	
																		196.967 Gold	
																		78	
																		Pt	
																		195.085 Platinum	
																		77	
																		Ir	
																		192.217 Iridium	
																		76	
																		Os	
																		190.23 Osmium	
																		75	
																		Re	
																		186.207 Rhenium	
																		(98)	
																		102.906	
																		Rh	
																		106.42 Rhodium	
																		74	
																		W	
																		183.84 Tungsten	
																		73	
																		Ta	
																		180.948 Tantalum	
																		72	
																		Hf	
																		178.49 Hafnium	
																		71	
																		Lu	
																		174.967 Lutetium	
																		(262)	
																		103	
																		Lr	
																		(267)	
																		104	
																		Rf	
																		(267)	
																		105	
																		Db	
																		(268)	
																		106	
																		Sg	
																		(271)	
																		107	
																		Bh	
																		(272)	
																		108	
																		Hs	
																		(270)	
																		109	
																		Mt	
																		(276)	
																		110	
																		Ds	
																		(281)	
																		111	
																		Rg	
																		(280)	
																		112	
																		Cn	
																		(285)	
																		113	
																		Nh	
																		(286)	
																		114	
																		Fl	
																		(289)	
																		115	
																		Mc	
																		(288)	
																		116	
																		Lv	
																		(293)	
																		117	
																		Ts	
																		(294)	
																		118	
																		Og	
																		(294)	

Mass numbers in parentheses are those of the most stable or most common isotope.

Atomic number — 14

Symbol — **Si**

Atomic mass — 28.086

————— Name ———— Silicon

Lanthanide Series	
57 La Lanthanum 138.905	58 Ce Cerium 140.116
59 Pr Praseodymium 140.908	60 Nd Neodymium 144.242
61 Pm Promethium (145)	62 Sm Samarium 150.36
63 Eu Europium 151.964	64 Gd Gadolinium 157.25
65 Tb Terbium 158.925	66 Dy Dysprosium 162.500
67 Ho Holmium 164.930	68 Er Erbium 167.259
69 Tm Thulium 168.934	70 Yb Ytterbium 173.055
Actinide Series	
89 Ac Actinium (227)	90 Th Thorium 232.038
91 Pa Protactinium 231.036	92 U Uranium 238.029
93 Np Neptunium (237)	94 Pu Plutonium (244)
95 Am Americium (243)	96 Cm Curium (247)
97 Bk Berkelium (247)	98 Cf Californium (251)
99 Es Einsteinium (252)	100 Fm Fermium (257)
101 Md Mendelevium (258)	102 No Nobelium (259)