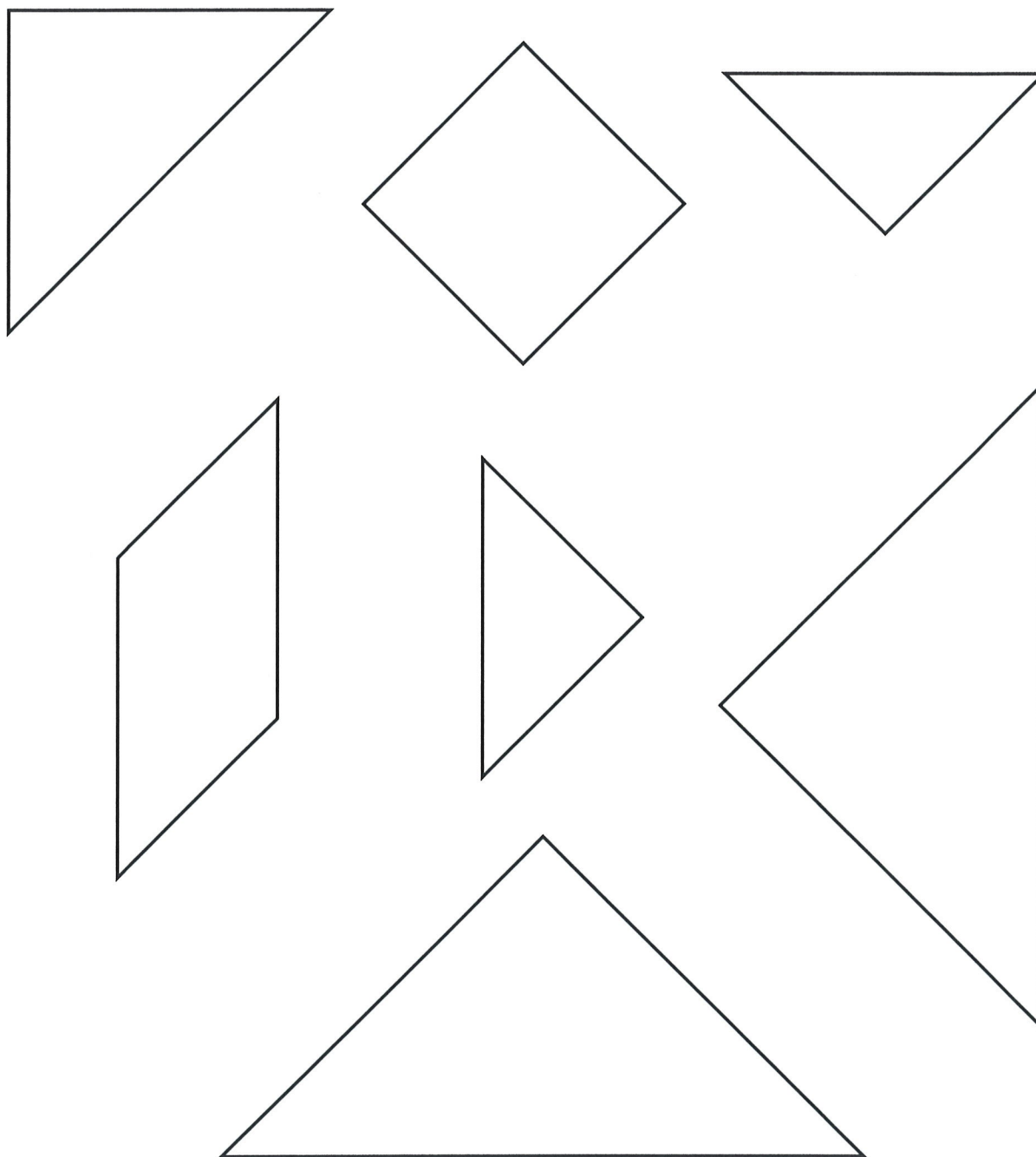
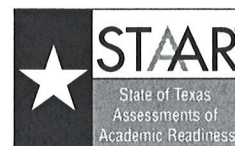


Colour Tiles

Tangram Pieces



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

1		Atomic number — 14										18	
1A	2	Symbol — Si										8A	
1	2	Atomic mass — 28.085										8	
3	4	Silicon — Name										10	
11	12	13	14	15	16	17	18	19	20	21	22		
1 H 1.008 Hydrogen	2 He 4.0026 Helium	3 Li 6.94 Lithium	4 Be 9.0122 Beryllium	5 B 10.81 Boron	6 C 12.011 Carbon	7 N 14.007 Nitrogen	8 O 15.999 Oxygen	9 F 18.998 Fluorine	10 Ne 20.180 Neon	11 Na 22.990 Sodium	12 Mg 24.305 Magnesium		
19 K 39.098 Potassium	20 Ca 40.078 Calcium	21 Sc 44.956 Scandium	22 Ti 47.867 Titanium	23 V 50.942 Vanadium	24 Cr 51.996 Chromium	25 Mn 54.938 Manganese	26 Fe 55.845 Iron	27 Co 58.933 Cobalt	28 Ni 58.693 Nickel	29 Cu 63.546 Copper	30 Zn 65.38 Zinc		
37 Rb 85.468 Rubidium	38 Sr 87.62 Strontium	39 Y 88.906 Yttrium	40 Zr 91.224 Zirconium	41 Nb 92.906 Niobium	42 Mo 95.95 Molybdenum	43 Tc Technetium	44 Ru 101.07 Ruthenium	45 Rh 102.91 Rhodium	46 Pd 106.42 Palladium	47 Ag 107.87 Silver	48 Cd 112.41 Cadmium		
55 Cs 132.91 Cesium	56 Ba 137.33 Barium	57 La 138.91 Lanthanum	58 Ce 140.12 Cerium	59 Pr 140.91 Praseodymium	60 Nd 144.24 Neodymium	61 Pm Promethium	62 Sm 150.36 Samarium	63 Eu 151.96 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.93 Terbium	66 Dy 162.50 Dysprosium		
87 Fr Francium	88 Ra Radium	89 Ac Actinium	90 Th 232.04 Thorium	91 Pa 231.04 Protactinium	92 U 238.03 Uranium	93 Np Neptunium	94 Pu Plutonium	95 Am Americium	96 Cm Curium	97 Bk Berkelium	98 Cf Californium		
103 Lu Lutetium	104 Hf Hafnium	105 Ta 180.95 Tantalum	106 W 183.84 Tungsten	107 Re 186.21 Rhenium	108 Os 190.23 Osmium	109 Ir 192.22 Iridium	110 Pt 195.08 Platinum	111 Au 196.97 Gold	112 Hg 200.59 Mercury	113 Tl 204.38 Thallium	114 Pb 207.2 Lead		
121 Nh Nihonium	122 Ds Darmstadtium	123 Rg Roentgenium	124 Cn Copernicium	125 Nh Nihonium	126 Fl Flerovium	127 Mc Moscovium	128 Lv Livermorium	129 Ts Tennessine	130 Og Oganesson	131 Nh Nihonium	132 Ds Darmstadtium		

Atomic masses are not listed for elements with no stable or common isotopes.

Lanthanide Series	57 La Lanthanum	58 Ce Cerium	59 Pr Praseodymium	60 Nd Neodymium	61 Pm Promethium	62 Sm Samarium	63 Eu Europium	64 Gd Gadolinium	65 Tb Terbium	66 Dy Dysprosium	67 Ho Holmium	68 Er Erbium	69 Tm Thulium	70 Yb Ytterbium
Actinide Series	89 Ac Actinium	90 Th Thorium	91 Pa Protactinium	92 U Uranium	93 Np Neptunium	94 Pu Plutonium	95 Am Americium	96 Cm Curium	97 Bk Berkelium	98 Cf Californium	99 Es Einsteinium	100 Fm Fermium	101 Md Mendelevium	102 No Nobelium

Updated 2017