

Math-in-CTE Curriculum Map: Health Science

CTE Course/Unit	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
Patient assessment	Input/output; Vital signs; Height/weight; Conversions; Instrument reading	Reading measurement; Basic operations; Ratio/ Proportion; Solving equations; Scales	6.NS.2; 6.NS.3; 7.NS.1; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.EE.2; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; A.CED.4
Healthcare delivery system	Diagnostic related group; Insurance/pay; Copay; Deductibles; Charting; Flash reporting	Percentages; Basic operations; Data analysis; How to read a graph; Input data; Creating a graph; 24-hour clock	6.NS.2; 6.NS.3; 7.NS.1; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4	A.APR.1; A.APR.7; N.RN.3; N.Q.1; S.ID.5; S.IC.3
Medical math	Medical math; Unit conversions	Ratio; Percent; Proportion; Multiplication; Division; Rounding; Place value; Metric prefixes; Roman numerals; Exponents; Unit conversions	6.NS.2; 6.NS.3; 7.NS.1; 6.RP.2; 6.RP.3; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3
Safety	Infection control; Body mechanics; R.O.M.;	Exponential growth; Angles; Problem solving;	6.EE.1; 8.EE.1; 8.EE.2; 8.EE.3; 7.G.5; 6.RP.1; 6.RP.2; 6.RP.3;	F.BF.5; S.ID.6; F.LE.2; F.LE.3; G.CO.9; G.CO.12; G.CO.13;

	OSHA; CPR/First aid; AED	Ratio/ proportion; Estimation; Measuring; Number sense	7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3	G.MG.3; N.Q.1; N.Q.2; N.Q.3; S.ID.6
Pharmacology	Drug calculations	Basic operations; Ratio/ proportion; Basic equations; Rounding; Number sense	6.NS.2; 6.NS.3; 7.NS.1; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3; 6.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; A.CED.4
Intro to Anatomy and Physiology	Body planes/regions/ and symmetry; Quadrants	Symmetry; Planes; Coordinate axis; Problem solving	7.G.5; 6.G.1; 7.G.4; 7.G.6; 8.F.3	G.CO.9; G.CO.12; G.CO.13; G.CO.5; G.GMD.1; N.Q.1; N.Q.2; N.Q.3; S.ID.6
Nutrition	Input/output; BMI; Dietary Analysis; Food label analysis; Caloric intake	Charting; Basic operations; Reading measurement; Unit conversions; Formulas	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 7.EE.1; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.REI.1; A.REI.2; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Integrated system	Rule of 9s; Measuring wounds/lesions	Surface area; Estimation; Measurement; Converting (cm – in.)	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.G.1; 6.G.2; 6.G.3; 7.G.1; 7.G.4; 7.G.6	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.GPE.7; G.MG.2
Healthcare careers	Job outlook; College cost; Lifestyle budget	Budgeting; Reading graphs/tables; Statistics/ probability	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 7.SP.5;	A.APR.1; A.APR.7; N.RN.3; N.Q.1; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1; S.ID.1; S.ID.2; S.ID.3;

			8.SP.1; 8.SP.3; 7.SP.6; 7.SP.7; 7.SP.8	S.ID.5; S.ID.6; S.MD.1; S.CP.1; S.CP.2; S.CP.4; S.CP.5; S.CP.6; S.CP.7; S.CP.9; S.MD.1; S.MD.2; S.MD.3; S.MD.4; S.MD.5; S.MD.6; S.MD.7
M.S. system	R.O.M.; Physical therapy positioning	Estimation; Angles; 3-D	7.G.5; 7.EE.3	G.CO.9; G.CO.12; G.CO.13
Cardio	Vital signs; Problem based learning	Equations; Formulas; Percentages; Data analysis; Number sense	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 6.EE.2; 6.RP.2; 6.RP.3; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1; S.ID.5; S.IC.3; A.CED.4
Elimination	Input/output	Measuring; Graphing	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	A.APR.1; A.APR.7; N.RN.3; N.Q.1; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Respiratory	Oxygen therapy	Percentages; Data analysis	6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3	S.ID.5; S.IC.3
Communication in healthcare	24 hr. clock; Unit identification and abbreviations	Elapsed time; Number sense; Oral to written and back	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1

Reproductive	Life stages; Growth charts	Percentiles; Measurements; Circumference; Probability; Statistics	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.RP.2; 6.RP.3; 7.EE.2; 6.G.1; 7.G.4; 7.G.6; 8.F.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 7.SP.5; 8.SP.1; 8.SP.3; 8.SP.4; 7.SP.6; 7.SP.7; 7.SP.8	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.CO.5; G.GMD.1; S.ID.1; S.ID.2; S.ID.3; S.ID.5; S.ID.6; S.IC.1; S.IC.3; S.IC.4; S.IC.6; S.MD.1; S.CP.1; S.CP.2; S.CP.4; S.CP.5; S.CP.6; S.CP.7; S.CP.9; S.MD.1; S.MD.2; S.MD.3; S.MD.4; S.MD.5; S.MD.6; S.MD.7; S.IC.2
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