TEKS CORRELATION TO PT1 - Second Semester

Uses a systems approach to investigate mechanical, fluid, electrical, and thermal	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1A Apply the universal systems model to technological activities	23	23	3	23	123	123	2	3	23		3	1	12	23	na	
1B Identify the inputs, processes, outputs, and feedback associated with each of the systems	23	23	23	123	3	23					2	13	13	123	na	

Works safely with mechanical, fluid, electrical, and thermal technology	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2A Master relevant safety tests											1				na	
2B Follow safety manuals, instructions, and requirements		23	23		3	2					1	1	1		na	
2C Make prudent choices in the conservation and use of resources and the disposal of materials	1	123	13								1	1	1		na	

Solves problems, thinks critically, and makes decisions related to technology	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3A Use specified problem-solving strategies	1	23	23	2	12	12		1	12	1	2	13	1	123	123	
3B Apply critical-thinking strategies	123	123	123	2	12	23	23	123	123	123	23	13	1	123	123	
3C Apply decision-making techniques to the selection of technological solutions	1	123	3			12			1			1	1	23	123	
3D Evaluate the impact of technology on scientific thought, society, and the environment	1	1	1												123	

Applies communication, science, and math knowledge and skills to tech. activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4A Prepare technical reports and presentations	1	1				13	2		3		3				na	
4B Solve algebraic equations		23	3	12	12	1	13		123	2	23	123		23	123	
4C Solve problems in English and System International units		23	3	2	12	1			3	3	23	3		23	123	
4D Perform unit conversions		23	3	2	2	1			2		23	3		23	123	

Knows the laws govering motion	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
5A Analyze examples of uniform and accelerated motion (linear, projectile, circular)	2	3	3	12	2	3	2	1		1				123	123
5B Generate and interpret graphs describing motion, including the use of real time technology		3		2	2	3								123	123
5C Formulate the effects of forces on the motion of objects	2	23	23	23	12	13	12	12	2	12			1	123	123
5D Develop and interpret a free-body diagram for force analysis		3		2	12	13	12							123	123
5E Identify and describe motion relative to different frames of reference	2	23	3	23	123	3	12	1	2	1				123	123

Know the concept of force	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6A Apply examples of complex tech devices where force must be controlled measured or applied	2	23	2		1	1	1		1	1			1	123	123
6B Analyze the relationship among force, pressure, voltage and temperature	2				1	3	3	13	23	23	3			123	123
6C Evaluate and predict what happens to an object when forces on it are balanced and when forces on it are unbalanced	2	23	23	23	123	123	12	12		1		1	1	123	123
6D Measure force in mechanical, fluid, electrical and thermal systems		2		2	12	13	13	3	13						123

Knows the concept of work	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
7A Relate mechanical, fluid, and electrical systems to force and movement		23		2	2	3		2	2	2		3		23	123
7B Identify and measure the effects of work done in mechanical, fluid and electrical systems		3		12	2	3						3		23	123

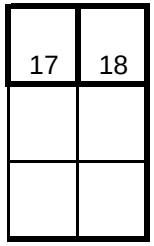
Knows the concept of rate	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8A Analyze rate in mechanical, fluid, electrical, and thermal systems		3		2	2	3	3		2	3	23			23	23
8B Measure, verify, and analyze rate in mechanical, fluid, electrical and thermal systems		3		2	2	3	3		3		23			23	23

Knows the concept of resistance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9A Identify resistance in mechanical, fluid, electrical, and thermal energy systems	2	3		2	2	3	3		3	2	3	2		23	23
9B Relate the princlple of force divided by rate to resistance in each energy system		3				3	3		3		3	2		23	23
9C Measure, verify, and analyze resistance in mechanical, fluid, electrical, and thermal energy systems	2	3				3		3	3		3	2		23	23

Knows the concept of energy	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10A Identify the nature of energy				1	1		3		3					23	123
10B Relate potential energy, kinetic energy and heat energy to the conservation of energy				1	1	3				1				23	123
10C Distinguish between work and energy				12	2	3	3		3					23	123
10D Measure, verify, and analyze energy in each system		3				3		3	3					23	123
10E Evaluate different methods of energy transfer that result in an increasing amt of disorder										3				23	123

Knows the concept of power	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11A Define power in mechanical, fluid, electrical and thermal systems				1		3	3		3		2			23	23
11B Relate the principle of work divided by time to each energy system		3		1		3	3		3		2			23	23

Knows the concept of energy transformation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
12A Observe and describe examples of kinetic and potential energy in mechanical, fluid, and electrical systems		3		1	13	3				1		1	1	123	123
12B Compare examples of energy transformations in mech., fluid, and elec. systems				1						1				23	123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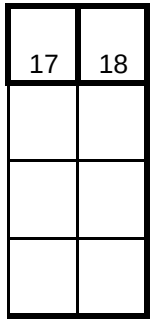
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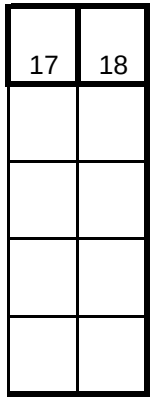
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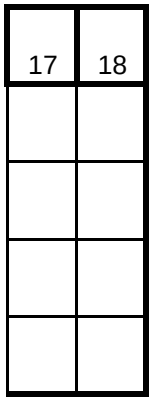
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