1st & 2 <sup>nd</sup> Quarters  1: Conduct experiments to provide evide sound (e.g., striking a tuning fork, plucking a vibrate (e.g., holding a piece of paper neathroat while speaking).  2: Construct explanations from observation is available to illuminate them (e.g., moon patterns in a kaleidoscope being illuminate 3: Investigate materials to determine whice	nce that vibrations of matter can create a guitar string) and sound can make matter ir a sound system speaker, touching your as that objects can be seen only when light being illuminated by the sun, colors and ind when held toward a light).	
sound (e.g., striking a tuning fork, plucking a vibrate (e.g., holding a piece of paper nea throat while speaking).  2: Construct explanations from observation is available to illuminate them (e.g., moon patterns in a kaleidoscope being illuminate	a guitar string) and sound can make matter or a sound system speaker, touching your as that objects can be seen only when light being illuminated by the sun, colors and od when held toward a light).	
2: Construct explanations from observation is available to illuminate them (e.g., moon patterns in a kaleidoscope being illuminate	being illuminated by the sun, colors and d when held toward a light).	
transparent materials such as clear plast through (e.g., translucent materials such materials such as construction paper), or aluminum foil).	ic wrap), allow only partial light to pass as wax paper), block light (e.g., opaque	
4: Design and construct a device that uses signal over a distance (e.g., using a flashlig signal lamp for sending a coded message to to simulate a telephone for talking to a class	ht and a piece of cardboard to simulate a package a classmate, using a paper cup and string	
8: Observe, describe, and predict patterns of in the sky (e.g., sun and moon appearing the sky, and set; stars other than our sunday).	o rise in one part of the sky, move across	
<b>9:</b> Observe seasonal patterns of sunrise between the number of hours of daylight daylight during summer as compared to wi	and the time of year (e.g., more hours of	
	WILD ORGANISMS	
Quarters (AMSTI Schools – No A	MSTI Kit 3 <sup>rd</sup> Quarter)	
5: Design a solution to a human problem and/or animals use their external parts to needs (e.g., outerwear imitating animal full or shells for protection).*	help them survive, grow, and meet their	
6: Obtain information to provide evidence patterns of behavior that help the offspring need for feeding, quacking or barking by pa 7: Make observations to identify the similar parents and to other members of the same of plant being the same shape, but differing but differing in fur color or pattern).	survive (e.g., crying of offspring indicating arents indicating protection of young). Inities and differences of offspring to their especies (e.g., flowers from the same kind	

1 <sup>st</sup> Grade – 2017-2018: Rotation B		
1st & 2nd	WILD ORGANISMS	
Quarters	(AMSTI Schools – No AMSTI Kit 1 <sup>st</sup> Quarter)	
	5: Design a solution to a human problem by using materials to imitate how plants	
	and/or animals use their external parts to help them survive, grow, and meet their	
	needs (e.g., outerwear imitating animal furs for insulation, gear mimicking tree bark	
	or shells for protection).*	
	<b>6:</b> Obtain information to provide evidence that parents and their offspring engage in	
	patterns of behavior that help the offspring survive (e.g., crying of offspring indicating	
	need for feeding, quacking or barking by parents indicating protection of young).	
	7: Make observations to identify the similarities and differences of offspring to their	
	parents and to other members of the same species (e.g., flowers from the same kind	
	of plant being the same shape, but differing in size; dog being same breed as parent,	
	but differing in fur color or pattern).	
3 <sup>rd</sup> & 4 <sup>th</sup>	SOUND, LIGHT, & SKY	
Quarters	1: Conduct experiments to provide evidence that vibrations of matter can create	
	sound (e.g., striking a tuning fork, plucking a guitar string) and sound can make matter	
	vibrate (e.g., holding a piece of paper near a sound system speaker, touching your	
	throat while speaking).	
	2: Construct explanations from observations that objects can be seen only when light	
	is available to illuminate them (e.g., moon being illuminated by the sun, colors and	
	patterns in a kaleidoscope being illuminated when held toward a light).	
	<b>3:</b> Investigate materials to determine which types allow light to pass through (e.g.,	
	transparent materials such as clear plastic wrap), allow only partial light to pass	
	through (e.g., translucent materials such as wax paper), block light (e.g., opaque	
	materials such as construction paper), or reflect light (e.g., shiny materials such as	
	aluminum foil).	
	4: Design and construct a device that uses light or sound to send a communication	
	signal over a distance (e.g., using a flashlight and a piece of cardboard to simulate a	
	signal lamp for sending a coded message to a classmate, using a paper cup and string	
	to simulate a telephone for talking to a classmate).*	
	8: Observe, describe, and predict patterns of the sun, moon, and stars as they appear	
	in the sky (e.g., sun and moon appearing to rise in one part of the sky, move across	
	the sky, and set; stars other than our sun being visible at night, but not during the	
	day).	
	9: Observe seasonal patterns of sunrise and sunset to describe the relationship	
	between the number of hours of daylight and the time of year (e.g., more hours of	
	daylight during summer as compared to winter).	