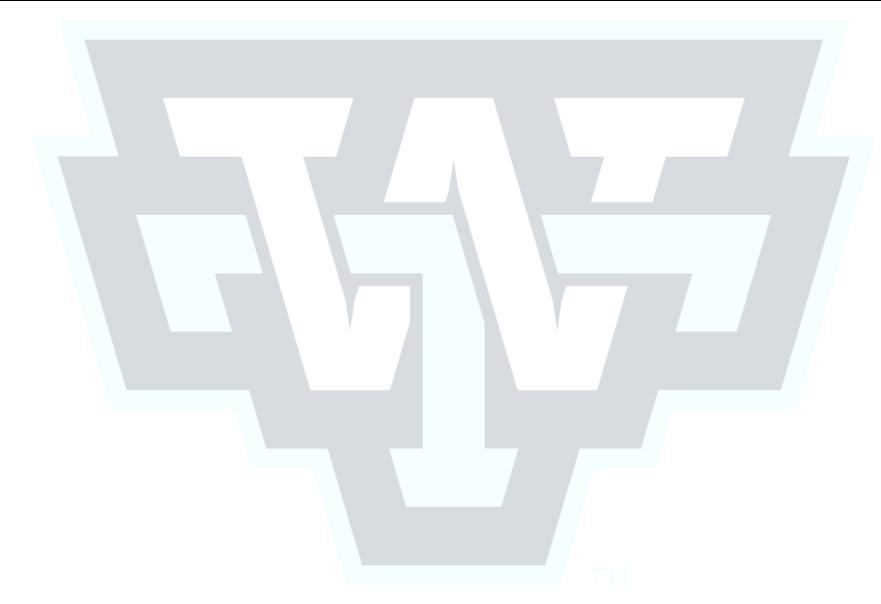
Washington Township School District						
STEM/Makerspace Curriculum						
Grade:	5	Mystery Science Unit/Project Title:	Mystery Science: Lab 3 Web of Life & Water Systems Stem: Filtration System			
NJ Learning Standard(s):	5-LS2-1					
Objective:		 SWBAT: Compare and contrast different elements that make up a water filtration system Evaluate how water filtration is an important part of the water cycle 				
STEM/ Unit Activities Suggested Assessments:		 Filtration System Hypothesis Packet (Teacher created & Shared) Journal Project Rubric 				
Supplies Needed:		 2-liter soda bottles cut in half (by an adult) per student or student group. napkins or paper towels gravel, sand and cotton balls for your filter dirty water, you can make it by adding cooking oil, food coloring, pieces of paper, and tiny pieces of Styrofoam to water 				
Resources to Support Unit:		Directions/Activity: http://pbskids.org/zoom/activities/sci/waterfilter.html Picture: http://japhilio.weebly.com/uploads/1/3/8/5/13856217/1350015821.jpg Article on Filtration (TYPES): https://wellnesshubnova.com/water-filtration-pros-and-cons/				

Washington Township School District						
STEM/Makerspace Curriculum						
Grade:	Whole-Wide Lab	Mystery Science Unit/Project Title:	Mystery Science: Lab 3 Web of Life Stem: Worm Farm *School Wide Experiment			
NJ Learning Standard(s):	5-LS2-1					
Objective:	 Students will: Evaluate how different matter can or can't be naturally decomposed over a period of time Analyze recycling concepts and how long a time frame it takes different matter to decompose 					
STEM/ Unit Activities	Worm Farm					
Suggested Assessments:	 Data sheets (5th grade students) Quarterly reports (created by 5th grade students but displayed for all students to examine) Project Rubric Unit Test 					
Supplies Needed:	 Large aquarium (Michele Cooper will donate) Red wigglers worms specifically sold for worm farms – sold at bait and tackle stores Soil, sand, stone Fruit, chicken bone and Styrofoam to decompose Grass seeds Magnifying glasses Worm Care/Food: Collect classroom garbage from snacks and lunches. Items that worms love to eat are breads, vegetable matter, paper napkins, paper towels, coffee grinds and unbleached coffee filters. Avoid meats, juice boxes, anything waxed, cardboard, plastics, and eggshells. The worms prefer smaller pieces, so large items like bananas peels should be torn up. Place 					

the garbage on top of the substrate. There is no need to bury it, because the worms will find it. 2,000 worms will eat approximately 8 lbs. of garbage a week.



Resources to	Lab (will need to tweak for aquarium): http://www.brighthubeducation.com/middle-school-science-lessons/27161-composting-science-projects-with-worms/			
Support Unit	Picture reference:			
	https://www.bing.com/images/search?view=detailV2&ccid=MR%2Bh%2FAav&id=D1F08704B97B2704477EE912D5809705A0 CAF97A&thid=OIP.MR-			
&	h_AavsiX5NYJFhI_7ZgEsEp&q=worm+decomposition+projects&simid=607995232802574067&selectedindex=112&mode=over lay&first=1 http://www.wormfarmfacts.com/Worm-Food.html - article			
Cross-Curricular Activities	http://www.wormfarmfacts.com/Get-Started.html - article on habitat/food needs			
	http://www.nytimes.com/2013/01/01/science/worms-produce-another-kind-of-gold-for-farmers.html - Article on Life of Worm Farmer			