

PENNSYLVANIA ACADEMIC STANDARDS



	Science & Technology								Math								
	3.1 Unifying Themes	3.2 Inquiry & Design	3.3 Biological Sciences	3.4 Physical Sciences Chemistry Physics	3.5 Earth Sciences	3.6 Technology Education	3.7 Technological Devices	3.8 Science Technology & Human Endeavors	2.1 Numbers, Number Systems & Number Relationships	2.2 Computation & Estimation	2.3 Measurement & Estimation	2.3 Mathematical Reasoning	2.5 Mathematical Problem Solving & Communications	2.6 Statistics & Data Analysis	2.7 Probability & Predictions	2.8 Algebra & Functions	2.9 Geometry
STRUCTURAL ENGINEERING																	
Ceiling Beam				•		•											
Catenary Arch	•			•		•											
Earthquake	•	•		•													
ACOUSTICS																	
Bongophone				•		•											
Drumbone				•		•											
Whisper Dishes				•		•											
FLUID DYNAMICS																	
Air Play				•													
Dam the Creek	•	•		•		•	•										
Flight Deck	•	•		•		•											
Hero's Fountain				•													
Minimal Surfaces				•													•
Parachute Launch				•		•											
Tennis Ball Launcher				•													
Water Tornado				•													
PUZZLES & BRAIN TEASERS																	
Army Ants												•					
Big Magic									•			•					
Box of Many Holes												•					
Crossing the River												•					
Cyclograph	•	•															•
Horse & Cowboy																	•
Hyperbolic Slot																	•
Magic Square									•			•					
Pyramid Puzzler																	•
Shut the Box									•			•		•			
Square Deal																	•
Towers of Hanoi												•					
Trapezoids 2 Triangle																	•
Vanishing Leprechaun												•					