

Washington Township School District

STEM/Makerspace Curriculum

Grade:	4	Mystery Science Unit/Project Title:	The Birth of Rocks/Energizing Everything Building a Stronger Bridge
NJ Learning Standard(s):	4-PS3-4, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, 4-PS3-4, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3		
Objective:	SWBAT design and test different bridge types		
STEM/ Unit Activities	Building a Stronger Bridge		
Suggested Assessments:	<ul style="list-style-type: none"> • Exit Ticket • Journal (attached) 		
Supplies Needed:	Per Group: Printer paper, Construction paper, 2 cups the same size, Ruler, Pen, Scissors, 25 pennies, 25 nickels		
Resources to Support Unit:	http://homeschool-101.com/stem-activity-build-strong-bridges/ Building a Stronger Bridge Student Hypothesis Sheet		

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Grade:	4	Mystery Science Unit/Project Title:	Birth of Rocks Mystery 3: Will a Mountain Last Forever? Mystery 4: How Could You Survive a Landslide?
NJ Learning Standard(s):	4-ESS1-1, 4-ESS2-1, 4-ESS2.A, 4-ESS3-2, 4-ESS3.B		
Objective:	SWBAT: <ul style="list-style-type: none"> • Construct a model beach • Analyze the effect of waves on a beach shoreline 		
STEM/ Unit Activities	Building Beaches		
Suggested Assessments:	<ul style="list-style-type: none"> • Exit Ticket • Journal/Notebook 		
Supplies Needed:	<ul style="list-style-type: none"> • Paint roller pan • Dry measuring cup • Sand (50-lb bag); clean beach sand can be purchased at your local hardware store. • Water • Plastic 500-mL water bottle • Pencil • Timer • Digital camera • Adult volunteer to help take pictures • Ruler with millimeter markings • Aquarium gravel (6 cups) • Lab notebook 		
Resources to Support Unit:	http://stem-works.com/external/activity/468 *Website link includes variations and extension activities		

