

# Building Bridges: A STEMtastic Challenge for Guinea Pig Pals

# **Student Worksheet**



### **Price List**

### **Super Structures:**

• Cardboard: Free (from cereal boxes, shoeboxes,

## etc.)

• Straws: 5 for \$1

• Popsicle sticks: 5 for \$1

Wooden skewers: 3 for \$1

Masking Tape: 6 inches for \$1

• Glue: \$2 (small bottle)

Hot glue stick:\$2 peer stick

• Yarn or string: 3 feet for \$1

• Paper clips: 20 foe \$1

### **Groundbreakers:**

• Playdough: \$3 (small tub)

• Dry clay: \$2 (small bag)

• Sugar cubes: 25 for \$1

Marshmallows: 10 for \$1

• Soil (from outdoors): Free

• Rocks and pebbles: Free (from outdoors)

### **Bonus Materials:**

Aluminum foil: 2 feet for \$1					
Brainstorm 3-5 i	deas for your bridg	e:			
Draw the design Identify the type		ts. Identify the superstructur	e and the substructure.		
, , ,,	J				
Create a shoppir	ng list! Keep in min	d your budget of \$25.			
Item	Cost	Number needed	Total cost		

• Fabric scraps: Free (leftover pieces)

Explai	Explain why you chose this type of bridge.					
Data '	Tables					
Data Tables						
•	Bridge Design					
•	Weight Held					
Stability						
	,					
•	Notes:					

If you could redesign your bridge, what would you do and why?				
REFLECTION: Write a short paragraph that describes both your successes and challenges as well as what you learned.				