

TeamSparks!TM Card

Ultimate Bridge Swap

Goal

Build the strongest bridge that spans the required distance using only the materials your sub-team gets through win-win negotiation—then adapt when plans change.

Mission

- **Your mission is to design and build a bridge that can span 12 inches and hold as much weight as possible.**
- **Split into two sub-teams.**
- **The total materials are split at random (or by color) between the two sub-teams.**
- **Negotiate trades so both sides benefit—aim for a win-win (each team should feel they got something useful). Be clear, respectful, and fair.**
- **After negotiation, start building with the materials you believe will help your design.**
- **Creativity, smart design, and function all matter. You'll learn a special condition soon...**

Coordinator Card

Time (Total: 10 minutes)

- **Team Split & Negotiation (3 min):** Form sub-teams and make win-win trades.
- **Spark Reveal**
- **Plan/Build (5 min):** Plan and build your bridge.
- **Bridge Testing (2 min):** Add weights to test strength

Resource Card

Materials

20 craft sticks (popsicle sticks)
10 drinking straws
2 mailing labels
12 inches string
6 paperclips
4 index cards
1 sheet of paper
1 sheet aluminum foil
4 rubber bands
1 plastic spoon

Items that may NOT be damaged and must be shared:

Scissors
Weights for testing

Mailing labels may NOT be attached to anything outside the structure

Strategist Card

Scoring (100 points total)

- **Negotiation (20 pts total)**
 - **Strategy (10 pts):** Trades show planning and aim for mutual benefits
 - **Communication (10 pts):** Persuasive, clear, respectful
- **Bridge Held Weight (5 pts per successful weight, up to 30 pts)**
- **Creativity of Bridge Design (20 pts):** Clear idea, clever structure, good use of limited materials.
- **Teamwork (30 pts):** Clear roles, conflict resolution, additive idea generation, time management, spark adaptability

The Spark Card

Swap!

Each sub-team must trade their entire negotiated sets and build using the other sub-team's final materials.

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Time (Total: 12 minutes)

- **Team Split & Negotiation (4 min): Form sub-teams and make win-win trades.**
- **Spark Reveal**
- **Plan/Build (6 min): Plan and build your bridge.**
- **Bridge Testing (2 min): Add weights to test strength**

Materials

- **20 craft sticks (popsicle sticks)**
- **10 drinking straws**
- **2 mailing labels**
- **12 inches string**
- **6 paperclips**
- **4 index cards**
- **1 sheet of paper**
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The Spark

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