**Design and Create Rules**

**General Concept:** Teams of 2 use communicative and interpretive skills to reconstruct a “creation”. The team whose reconstructed creation is closest the original creation wins.

**Time:** 35 minutes

**Section 1: Competition**

* On site, a “creation,” or an assembly of common materials (see section 2) will be provided at each Design and Create team’s table (station). The creations distributed to all pairs will be identical.
* Each competitor of the pair has his or her designated role. One person is a “designer” and the other person is a “creator”. The designer’s role is to look at the creation and write a set of instructions for the creator to rebuild the creation. **Only words and numbers** are allowed to be written as part of the instructions. **No pictures or other forms of symbols are permitted**. The creator’s role is to reconstruct the creation based on the set of instructions written by his or her partner.
* An event supervisor with a stopwatch will countdown to indicate the start of each timed section (the designers’ and creators’ competition times).
* In the first 15 minutes of the event, the designer, provided with lined paper and a pencil, has to right a set of instructions for his or her partner. The designer allowed to touch the creation, as long as he or she does not alter it.
  + Only the designer is allowed to be at the station during this part of the competition. For this part, the creators are not allowed in the competition zone (which will be defined on the day of competition).
  + The creator is not allowed to see the creation before or during the competition, but may be allowed to see the creation if he or she wants to after ALL competitors have finished the event.
* Once the first the 15 minutes are up, event supervisors will lead the designers out of the competition zone. Other event supervisors will replace the original creations with a box of building components.
  + The boxes must include all the pieces that were used in the original creations.
  + The boxes may contain pieces that were *not* used in the original creations.
    - Suggestion: designers indicate in the instructions which pieces were used to build the original creation.
* After each team’s station is set up, event supervisors lead the creators into the competition zone to their teams’ stations. Creators may begin to reassemble the creations with only on their partner’s instructions and the items in the boxes once the event supervisor with the stopwatch counts down to start.
* Designers and creators must stay in their seats until their competition times are up.
* After the competition is over, event supervisors will inspect the assembled creations and the instructions to score the teams.

**Section 2: Materials**

Possible Building Components

* Toothpicks
* Styrofoam
* Marshmallows
* Uncooked pasta
* Beads
* Straws
* Scotch tape

Tools Provided at Competition:

* Pencils
* Lined paper
* All building components

Tools Allowed to Bring

* Colored pencils
* Rulers

**Section 3: Violations**

* Any symbols other than words and numbers used in the instructions
* Alterations to the original creation
* Communication with partner in any means other than via the instructions
* Any materials brought other than those permitted in section 3.
* Entering the competition zone before permitted by event supervisors
* Leaving the competition zone before time is up
* Failure to comply with event supervisors

**Section 4:** **Scoring**

There will be a Design and Create Rubric created specifically for the creation presented at competition. It will not be released until after competition.

For a sample Design and Create rubric and creation, go to the Design and Create tab under Science Synergy Invitational on sciencesyn.weebly.com.