

Marshmallow Tower Challenge and Paper Tower Variation

Prepare one identical kit per team, explain the whole-marshmallow and freestanding rules, then give groups 18 minutes to build.

Host guide / Letter / 3–5 adults per team; one identical kit for each team / 35–40 minutes including setup, 18-minute build, measuring, and optional debrief

Read the guide privately first if this activity has hidden answers. Print single-sided at Actual size / 100%. Cut only sheets marked CARDS. Keep answer keys with the host.

What you need

- Per team: 20 sticks of uncooked regular spaghetti; 1 yard (3 ft / about 91 cm) of string; 1 yard (3 ft / about 91 cm) of masking tape; 1 whole standard-size marshmallow.
- For the host: one stable table per team, timer, measuring tape, and optional paper bags to distribute kits.
- Optional scissors only if the host wants them available for cutting; explain where they will be used and keep them on the table.
- For the paper variation: 10 sheets of ordinary paper, 1 yard of masking tape, and a light paper ball or paper clip as the top marker per team; this is a different challenge, not the standard version.

How to run it

1. Prepare one equal kit per team. Check that each contains exactly 20 dry spaghetti sticks, 1 yard of string, 1 yard of masking tape, and 1 whole standard-size marshmallow. Put one kit on each stable table.
2. Divide into teams of three to five. Read the rules: use any amount of the kit; spaghetti, tape, and string may be broken or cut; the entire marshmallow must be on top; the structure may not be held when time ends.
3. Set a visible timer for 18 minutes. Teams may build, test, and revise on their table. Give optional time updates at 9, 5, 3, and 1 minute. Do not coach a specific design or inspect private discussions.
4. At 18 minutes, call “hands off.” Wait briefly for structures to settle, then measure from the table surface to the highest point of the marshmallow on a freestanding tower. If a structure collapses or the marshmallow is not fully on top, mark it as not meeting the standard rule.
5. If the group wants a competition, announce the tallest qualifying tower. If not, skip ranking and invite teams to describe one design change they made. A team may opt out of public sharing.
6. Offer a short optional debrief, then collect pasta, tape, string, and marshmallows. Do not eat challenge materials; discard food that was handled or left uncovered.

Use the standard kit accurately

Tom Wujec’s official Marshmallow Challenge instructions specify 20 sticks of regular uncooked spaghetti, one yard of string, one yard of masking tape, one whole marshmallow, and an 18-minute limit. The entire marshmallow sits at the top, and the finished structure must stand without support. The official instructions also allow teams to break the pasta and cut or use as much or as little material as they choose.

This page uses those mechanics and keeps the debrief optional. It does not repeat claims about how particular age or professional groups perform, and it does not promise that the exercise teaches a work skill.

Set up a comfortable table round

Give each team a stable table and enough space to build without reaching across another group. Seat people who prefer to remain seated and place the kit within comfortable reach. There is no required physical contact between participants; each person handles only the materials if they choose.

Dry pasta can snap into sharp pieces. Ask participants to keep fragments on the table, avoid tossing materials, and sweep them up at the end. Keep scissors on the table and use them only when necessary. Never use flames, hot glue, or tools not included in the instructions.

Offer a non-food alternative

If a participant does not want to handle food, has a relevant allergy, or prefers not to use spaghetti, offer the paper variation listed in materials: 10 sheets, one yard of masking tape, and a small paper ball or paper clip marker. The rules can be: build the tallest freestanding structure with the marker on top in 18 minutes. Label it clearly as an adapted paper challenge; it is not the standard marshmallow task.

A participant may also be a timer, measuring helper, observer, or note-taker, or pass entirely. Do not ask for health details or reasons.

Printable host script

“Each team has 20 uncooked spaghetti sticks, one yard of string, one yard of tape, and one whole marshmallow. In 18 minutes, build the tallest structure that stands on its own with the whole marshmallow on top. You may use any amount of the materials and break or cut them. At the signal, let go. You may build, observe, help time, or pass.”

At the end: “Hands off. We will let each tower settle, then measure only structures that stand with the full marshmallow on top. Sharing a reflection is optional. This game does not rate anyone’s work ability.”

Measure and close fairly

Measure from the table surface to the highest point of the marshmallow. Use the same measuring method for every table and do not touch a structure during the check. If two towers are close, record a tie or describe the result without declaring a winner.

The challenge is competitive by default, but hosts can run it as a non-scored build. Either way, do not use the outcome as evidence about a team or individual. If you debrief, ask what the group tried or changed, then let people pass.

CARDS / Marshmallow Tower Challenge and Paper Tower Variation

<p>WG06-001 / Materials</p> <p>Kit check</p>	<p>WG06-002 / Rule</p> <p>Read the standard rule</p>
<p>WG06-003 / Timer cue</p> <p>Midpoint reminder</p>	<p>WG06-004 / Timer cue</p> <p>Five-minute reminder</p>
<p>WG06-005 / Safety and rule</p> <p>Hands-off check</p>	<p>WG06-006 / Scoring</p> <p>Measure consistently</p>

1 inch / print at 100%

25 mm / print at 100%

CARDS / Marshmallow Tower Challenge and Paper Tower Variation

<p>WG06-007 / Access</p> <p>Seated setup option</p>	<p>WG06-008 / Debrief</p> <p>Optional reflection</p>
---	--

Host answer key

Keep this section separate from player cards. Accept equivalent wording where the meaning matches.

- 01. Before each round, count 20 uncooked spaghetti sticks, measure 1 yard of string, measure 1 yard of masking tape, and add 1 whole standard-size marshmallow. Give every team an identical kit.**
- 02. The whole marshmallow must sit on top. The tower must stand on its own when the 18-minute timer ends. Teams may break or cut materials and may leave some unused.**
- 03. At 9 minutes, announce the remaining time only. Do not suggest a design or compare teams. Teams may continue building or testing.**
- 04. At 5 minutes, say the remaining time and remind teams that the structure must be freestanding with the marshmallow on top.**
- 05. At 18 minutes, ask everyone to release the tower and step hands away. Allow the structure to settle before measurement.**
- 06. Use one tape measure and start at the table surface. Measure to the top of the marshmallow without touching the tower. Note only whether each structure meets the standard rule and its height.**
- 07. Keep the same standard materials and timer, but arrange the table at a comfortable seated height. A participant can build while seated, keep time, observe, or pass.**
- 08. Ask: “What did your team try first?” or “What changed after you tested a structure?” Participants may answer, write, or pass. Do not interpret the response as a performance assessment.**

Hosting questions

What materials does each team need?

The standard kit is 20 sticks of uncooked regular spaghetti, one yard of string, one yard of masking tape, and one whole standard-size marshmallow.

How long is the build?

The standard challenge uses 18 minutes. The host should stop work at the timer and check that the structure stands without support.

Can we use a paper alternative?

Yes. Use the clearly labeled paper-tower variation with a paper marker. It is an adapted activity, not the standard marshmallow challenge.

Does the activity prove a team can collaborate?

No. It is a short game with limited materials and an artificial constraint. Do not infer work ability or promise an outcome from the result.

References

Creator-hosted primary rules source for the standard kit, 18-minute limit, whole marshmallow, freestanding requirement, and permitted material use.

<https://www.marshmallowchallenge.com/>

University-hosted facilitation reference for the same kit and a separate 18-minute build/debrief structure. No performance claims from the source are repeated.

<https://www.jmu.edu/chbs/ipe-ide/toolkit/marshmallow-challenge.shtml>

Original AI-assisted resource with AI editorial review. Independent human playtesting and physical printing have not been completed. Answer, listen, or pass.