



Long Activity
Ages 6–8
30 minutes

Newspaper Tower

Description

Using only masking tape and newspaper, design a tower that can support a basketball for 20 seconds or more.

Space Considerations

A large indoor space where participants can safely work in groups

Competencies

- Creative and imaginative thinking
- Engineering
- Teamwork
- Problem solving

Materials

- Recycled newspaper (recommended: several full newspapers per group)
- Masking tape or painter's tape (recommended: one roll per team)
- Safety scissors (optional; participants may be able to rip tape or newspaper by hand)
- Basketball
- Stopwatch or cell phone (to keep time)
- Pencils and scrap paper (to sketch designs)

Implementation

1. Divide participants into teams of two to five participants.
2. Provide each team with a significant amount of newspaper and one roll of masking tape. It's a good idea to have a lot of extra material available should teams need more.
3. Provide each team with pencils and scrap paper to sketch out their designs,

4. The rules of this challenge are straightforward: teams have to create a tower that can support a basketball (or another similarly sized ball, like a soccer ball or volleyball) for at least 20 seconds. It is important that teams think about the top of their towers and where the basketball can be placed—encourage them to think about this. If the top of the tower ends in a point, the basketball likely won't be supported. We've included a simple sample image below, but it may be best to allow teams to think about designs without the aid of any picture or template—you be the judge of this as it may depend on the group.
5. The very important stipulation to this challenge for you to communicate to the teams: if there are multiple teams that have built towers that can successfully support a basketball for 20 seconds, the winning team is the one that has the **tallest** tower.
6. It is recommended to put a time limit on this activity. This activity can work with anywhere from 10–30 minutes, plus the time needed to test each of the towers. Announce the remaining time regularly (10 minutes left, 5 minutes left, 1-minute left, etc.) or put the timer/clock in a visible location for all to see.
7. At the end of the time limit, test each tower by placing the basketball on the top of each tower. Note which towers were able to support the basketball for 20 seconds. The winning team is the one that successfully meet this stipulation *and* has the tallest tower.

Accessibility Considerations

- Read and print out all the instructions for this activity
- Give participants the option to work alone if desired
- Encourage participants to contribute different elements to the team if desired (For example, some team members can build while the others instruct or contribute to the design process)

Book Suggestions

The Canadian Kids' Guide to Outdoor Fun by Helaine Becker

How to Solve a Problem: The Rise (and Falls) of a Rock-Climbing Champion by Ashima Shiraishi

Templates and Images



Printable Instructions:

- Using only newspaper and masking tape, create a tower that can support a basketball for at least **20 seconds**.
- It is important to think about the top of your tower and where the basketball can be placed. If the top of the tower ends in a point, the basketball likely won't be supported. What can you design for the top of the tower?
- If more than one team builds a tower that can successfully support a basketball for 20 seconds, the winning team is the one that has the **tallest** tower. So, think about how you can make your tower as tall as possible but still stable enough to support the basketball.
- It's a good idea to sketch out designs before you start building.
- You will have **30** minutes. **(modify this as desired)**

Good luck!