



## TEAMWORK / CONSTRUCTION ACTIVITY

*Build a tower, as tall as possible (the finished structure must be entirely self-supporting) in the given time (30-45 minutes), out of drinking straws and sticky tape.*

### Resources

- Plastic drinking straws
- Sticky tape
- Scissors

### Instructions

1. Hand out a packet of straws (at least 150), a roll of sticky tape and a pair of scissors to each team;
2. Tell the teams that the aim of the exercise is to build the tallest, free-standing tower, using the materials provided, in the time given (30-45 minutes), and let them at it;
3. Depending on the experience of the Cubs, you may provide hints to assist. Hints include:
  - Encourage teamwork—idle hands are wasted hands. The most efficient approach is to identify individual tasks and to have everyone doing something, all the time, although not necessarily the same thing all the time. If sticky tape is provided without a dispenser (a good idea), for example, someone can dedicate their time to cutting off pieces of sticky tape for others to use in constructing the tower (this task can be rotated if this is not perceived to be an interesting task);
  - Build the tower in a modular fashion, so that individuals or pairs of individuals can work on modules which can ultimately be connected together. It is usually difficult for more than one or two people to productively work on the final assembly process at once. In this way, younger Cubs can work with older, more experienced Cubs, or they can simply copy the work of an older Cub at their own pace, with input from an older Cub as and when required;
  - Use triangular elements as much as possible, as they are the most rigid. One very successful approach is simply to make as many 'straw triangles' as possible in the first 10-15 minutes, then for one or two team members to start assembling these individual components into a vertical structure. Choosing the most efficient way to integrate such components then becomes the real challenge;
  - Take care to make individual triangular or modular components consistently, otherwise they will not fit together well, and the tower will become unstable as it grows. If care is taken, it is possible to build a stable tower of 3-4 metres on a simple triangular base. The more careless the construction, the bigger the base will need to be to support a given structure.

## Resource Preparation

### Plastic Drinking Straws

Reliance	Pkt of 150	\$0.65	Coles
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Any plastic straws will suffice. Since all teams use the same materials, success is largely relative. The number of straws that can reasonably be used in 30-45 minutes will vary a little with the team size—the bigger the team, the larger (potentially) the number of straws that may be incorporated into the structure. From experience, a team of 4 will use 100-120 straws in 45 minutes. Older, more experienced Cub may be able to use more.

### Sticky Tape

Sellotape	12 mm x 66 m	\$2.19	Coles
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Thinner sticky tape is generally better for this task.

### Scissors

<Any>		\$<varies>	Coles
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Ensure that the scissors provided work well enough to easily cut the sticky tape. The tape cutting task can easily become a bottleneck.