

# DISCOVER. BUILD. CHALLENGE.





#### Recommended for 5 - 12 year olds

# SPAGHETTI TOWER

Now's your chance to think like an engineer!

Build the strongest and tallest tower out of spaghetti and tape!

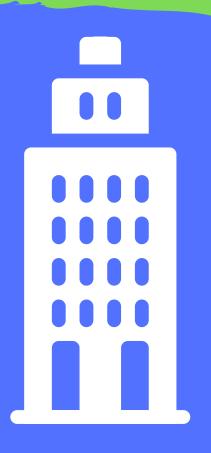
How tall and stable can you make yours?

Share your creations!

Tag us on Twitter @TyndallInstitut

#### **Materials**

- 30 sticks of spaghetti
- 1m of cellotape
- 1 marshmallow
- Measuring tape



### THE MISSION

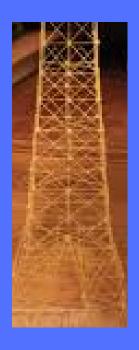
To build a tower as high as possible using only spaghetti and cellotape. The marshmallow must be placed on the top of the tower and must stay in place unassisted for 30 secs.

# THE RULES

- You may only use the materials mentioned.
- You may not use any other materials to help you support your tower.
- The marshmallow must be on the top and stay there for 30 secs unassisted.
- Measurement is a vertical measurement from the table top up.
- Spaghetti may be broken into smaller pieces. However, once broken, pieces may not be replaced.

## QUESTIONS

- What shape will give you the strongest base?
- What building techniques make the tower stronger?
- Does the placing of the marshmallows affect the strength of the tower?
- Could you build a stronger tower with more of the same materials? What other materials could you use?
- Does the size and shape of the base change the strength of the tower? Try out different designs.



#### **Skills**

- Experimenting
- Designing
- Making
- Observing