



making physics matter



Age  
3-5  
years

# Phizzi enquiry

## Lolly stick skyscraper

A Phizzi Foundation enquiry, taken from the EYFS Science Talk programme for Ogden primary partnerships.



### Key questions

- Q. Where have you seen sticks used where they are very strong?
- Q. Which shapes are strong?
- Q. What would happen if the air was stronger?
- Q. What would happen if we used the sticks differently?

### Resources

- Photos/pictures of strong structures using sticks/ wooden planks
- Story of *The Three Little Pigs* (puppets of a pig and a wolf – optional)
- Wooden pegs
- Lolly sticks
- Airzooka or Air Vortex Cannon (or make your own with a yoghurt pot, balloon, sticky tape)  
[https://www.youtube.com/watch?v=\\_uGDARSz7DI](https://www.youtube.com/watch?v=_uGDARSz7DI)

### Early learning goals

**C&L (40-60+) understanding:** Children answer 'how' and 'why' questions about their experiences.

**C&L (40-60+) speaking:** They develop their own narratives and explanations by connecting ideas or events.

**UtW (40-60+) the world:** Children know about similarities and differences in relation to places, objects, materials and living things.

### Activity: Lolly stick skyscraper

**Engage:** Read/tell the story of *The Three Little Pigs*. Refer back to the second little pig and ask the children to explain why the wolf was able to blow his house down. Share the pictures of strong wooden structures, discuss why these might be stronger than the little pig's house.

**Explore:** Challenge the children to build the strongest house made of sticks using only the wooden pegs and lolly sticks. Observe how the children use the resources and explain their ideas. Use key questions to prompt discussion and extend the activity where appropriate.

**Conclude:** Use the Airzooka or vortex cannon to test each of the houses – the children could try to blow their own designs down – or use the wolf puppet. Discuss which houses were best and invite children to explain.

