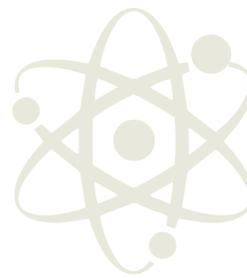




making physics matter



Age  
3-5  
years

# Phizzi enquiry

## Pipe cleaner push & pull

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



### 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: Pipe cleaner push & pull

**Engage:** Display a range of objects and ask the children how they could move them without touching them. Offer magnets and establish prior knowledge (refer to safe use of magnets). Ask children to use the magnets to move some of the objects (notice that some cannot be moved – gather explanations). Use key questions to guide discussion.

**Explore:** Through trial and error, challenge children to find out "How many pipe cleaners can you move to the top of the bottle using the magnets?". Encourage them to think about the material, size of the pieces and properties of the magnet.

**Conclude:** Share findings and discuss the best methods for moving the pipe cleaner pieces.

### Key questions

- Q. What is a magnet and how does it work?
- Q. What might help the magnet to 'pick up' more (pipe cleaner) pieces?
- Q. What would happen if the (pipe cleaner) pieces were... (longer/made from a different material)?
- Q. How would magnets be useful in everyday life?

### Resources

Range of objects made from different materials (including metal) for exploration

Pipe cleaners (cut into approximately 2cm lengths) and put into a clear plastic bottle (one or more per group)

Magnets (suitable for age range)\*

\*H&S –

- Extra precaution should be taken when using magnets.
- ALWAYS use magnets under adult supervision.
- NEVER put magnets in mouths (use a size appropriate to the child eg never button magnets).
- ALWAYS count magnets in and out before and after an activity – swallowing magnets can be harmful.
- NEVER use magnets near electronic equipment, including pacemakers and computers.

