



making physics matter



Age
3-5
years

Phizzi enquiry

Paper clip painting

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.

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

Activity: Paper clip painting

Engage: Offer children an opportunity to explore a range of magnets and a basket of objects (magnetic and non-magnetic). Ask them to describe their observations.

Explore: Place a paper plate in front of them with three splodges of paint and a paper clip. Ask them how they could use the magnet wand to paint – then explain they mustn't get the magnet dirty! (Encourage them to think around the problem, and use the magnet underneath the plate). Add a challenge to the task eg only two colours can mix together.

Conclude: Invite children to discuss their observations, using key questions to prompt a 'What would happen if....?' challenge to extend thinking and problem solving.

Key questions

- Q. What do you notice about the materials in the basket (and the magnets)?
- Q. Which objects can be moved with the magnet – how are they similar?
- Q. Would there be other objects we could paint with using the magnet?
- Q. What would happen if we made the paper plate thicker? (try adding layers of paper plates until the magnets no longer move the paper clip – no paint necessary!)

Resources

- Basket of objects (magnetic and non-magnetic)
- Paper plates
- Three colours of paint (suitable for age range)
- Metal and plastic paper clips
- Magnet wands
- Painting aprons
- Cloths/plastic mats
- *H&S – this is a messy activity!
- 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.

