

# Can you design a colour-changing object?



Paint that changes when it comes in contact with water is called '**Hydro-chromatic**' paint.

'Hydro' basically means water and 'chromatic' means the colour. '**smart material**', meaning that it changes in some way when we interact with it.

Jayne Parkes tell you about Squid London's colour-changing umbrella.

## Skills that you'll use

- You will learn more about materials and their properties.
- You will identify and solve design problems.

## Materials needed

- Pencil or pen
  - Some paper
  - Colour pens and pencils (optional)
- Optional task materials
- Scissors
  - Glue stick, stapler and/or cello tape



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## Activity plan

- **Watch** Emma-Jayne Parkes tell you about Squid London's colour-changing umbrella.
- **Look** around your home for all of the things that come in contact with water.
- **Collect five of those things.**

(A good place to start looking would be the bathroom and the kitchen but don't forget to also look in your room).



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## What have you collected?

- **Write** down the name of your five objects.

**USE the sheet to list** which of the following they also come in contact with:

- **Sunlight**
- **Heat** (even the heat of your hand)
- **Cold** (cold water for example)
- **Sound**
- **Pressure** (like when something is gripped tightly in your hand)

- **Pick your favourite** object and use one or more of the things that it comes in contact with to make it more fun, or give it an extra function.

(For example, you could design a toothbrush that slowly changes colour from the heat of your hand to let you know how long you've been brushing your teeth for).



# Can you design a colour-changing object?

**Draw your design** and **label** it to show how it works. These labels are known as annotations.

**Colour** in your design and share it Sim and with the Design Museum!

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