Group 1 - Alex, Ben, Eleanor and Emily
What we did while we were at AkzoNobel:

- Learnt how to make paint
- Fire proofing
- Analytical chemistry
- Marine
- Yachts
How to make paint

- Resin
- Solvent
- Additives
- Pigment

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<tr>
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<th>1K paint</th>
<th>2K paint</th>
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<td>Auto oxidises to dry</td>
<td>A and B need to be mixed so a chemical reaction occurs for the paint to dry</td>
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<td>Less hard wearing</td>
<td>More suitable for heavy access areas</td>
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<td>Dry faster</td>
<td>Up to 8 hours between A and B</td>
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Fire proofing

- Paint slows down heat transfer - maintains steel structure
- Hydrocarbon paint - fibrous, oil and gas fires
- Cellulose paint - wood and paper, hotels and shops
- Passive fire protection
- 1000°C furnace
- Liquid nitrogen
Analytical chemistry

• Deformation of competitors paints - centrifuge, chromatography, spectroscopy

• NMR

• Dealing with complaints - SEM
Marine and yachts

- Marine - more practical paint, less high quality finish
- Yacht - more aesthetically pleasing finish for the yacht
- Marine boats want paint that doesn’t allow organism to stick to the hull as this increases drag and uses more petrol
- Currently marine boats use biocides that kill organisms and pollutes the oceans but in the future they want to reduce biocides and use hydrophobic paint so the organisms don’t stick to the boat
- Pin needle for adhesion, dolly test for pressure, and gloss units
We didn’t expect the company to be so established. The site was 46 acres and there were 800 staff members on site at a time.

They made 25 million litres of paint a year.
What we didn’t expect

• Sustainability - using waste products from other companies such as oil from cashew nuts

• Eco premium program - the development of products with lower toxicity, improved energy efficiency, use of natural resources and reduced emissions waste

• Testing facilities all over the world to test the paint in different oceans - Sweden, Brazil, Singapore