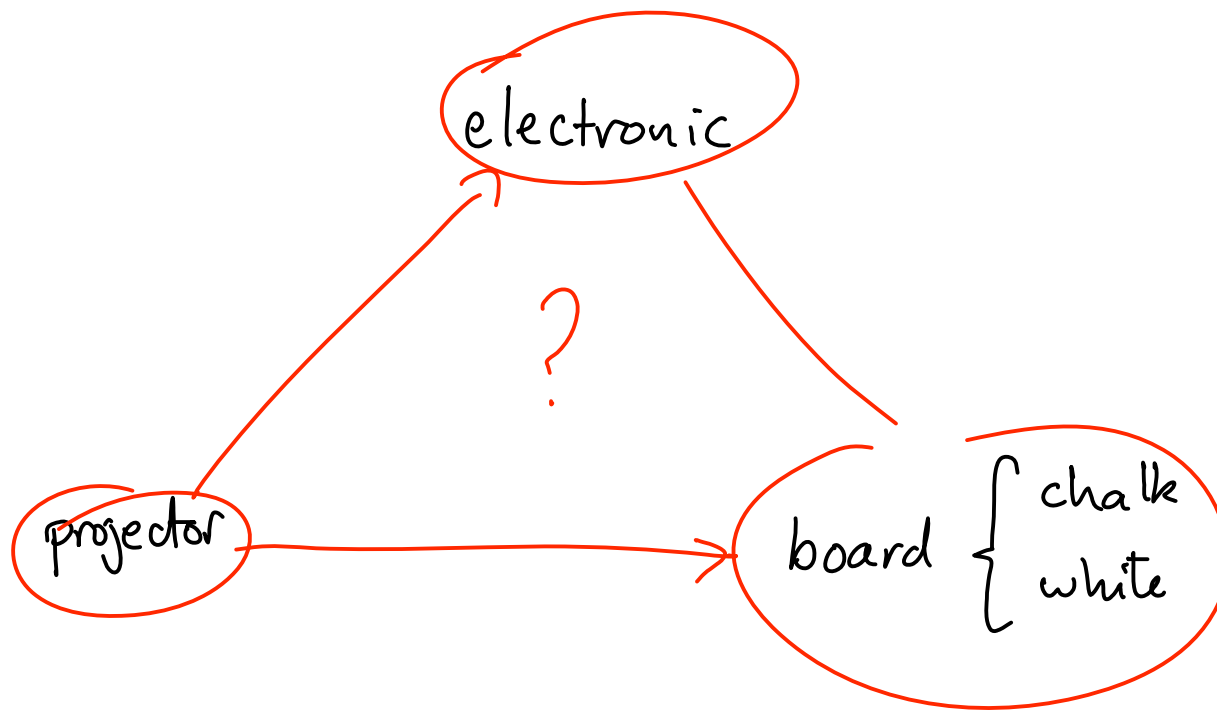


# **Electronic media vs. traditional media**

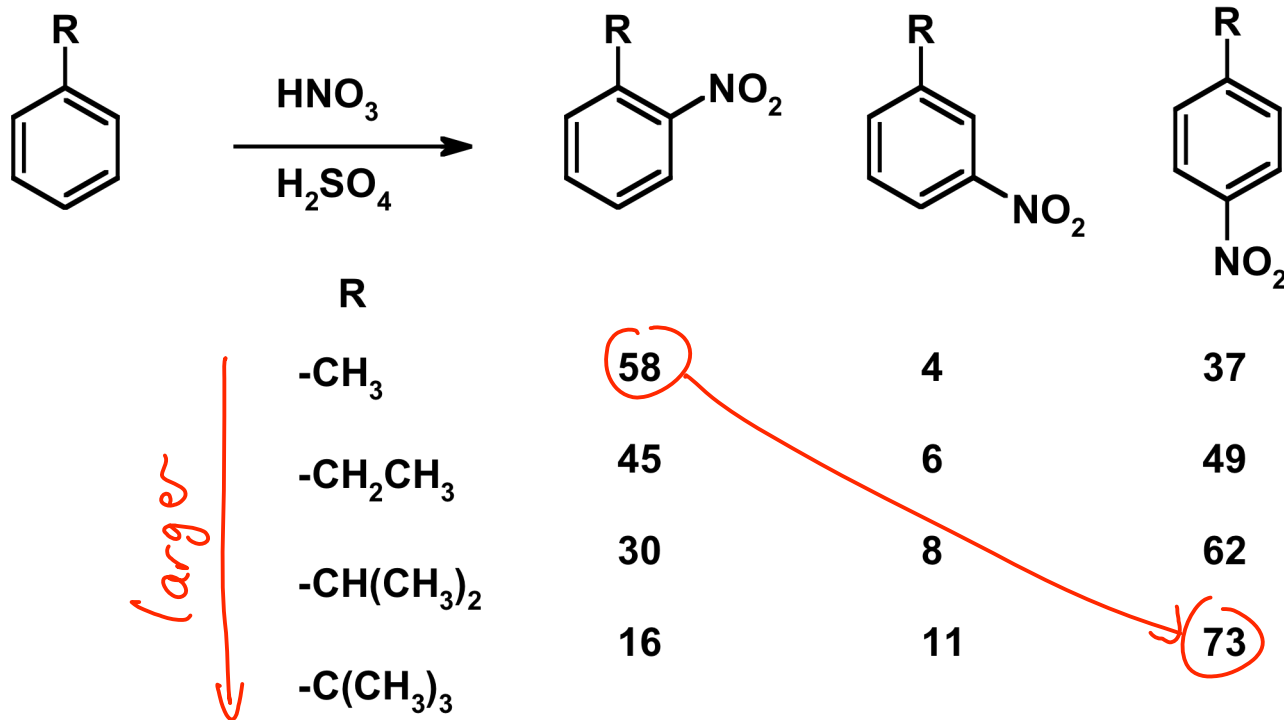
## **1st session**

	<b>Electronic Media (Powerpoint or other)</b>	<b>Traditional media (handwriting of material)</b>
<b>Pros</b>	<ul style="list-style-type: none"> <li>• Legibility - some Profs have poor handwriting</li> <li>• Liberating for instructor - can face students etc</li> <li>• Control of errors in transcription</li> <li>• Issues of stereochemistry can be reinforced</li> <li>• Special visual effects - movies/animations</li> <li>• No deterioration of slides over time</li> <li>• Portable</li> <li>• Some material is not useful for students to write out</li> </ul>	<ul style="list-style-type: none"> <li>• Controls pace</li> <li>• Controls amount of material</li> <li>• Forces students to write structures</li> <li>• Continuity and showing big picture - multiple frames - larger presentation space.</li> <li>• Spontaneity: immediately address students questions</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• Controlling the pace (and amount of material)</li> <li>• Additional effort to make slides (but 1x investment)</li> <li>• Students may develop a reluctance to draw structures</li> <li>• Lack of spontaneity (e.g. modification of structures)</li> <li>• Powerpoint = "linear sequence"</li> <li>• Technological problems</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of 3D/animations</li> <li>• Too slow to cover all material</li> <li>• Making students into stenographers.</li> <li>• Back turned to students</li> <li>• Quality of whiteboards</li> <li>• Might make drawing structures look too easy</li> </ul>



HYBRID ?

# “other” substituent effects

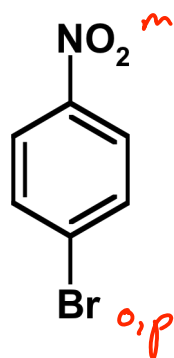


## Conclusion:

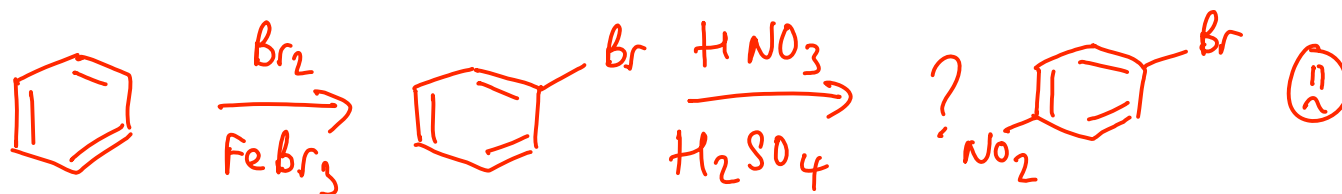
- (i) R = o, p directing
- (ii) larger R ⇒ inc. % para due to steric effects

# Synthesis of disubstituted benzenes

Look at the directing effects of the substituents and use that to decide the order in which the reactions need to be carried out.



$\Rightarrow$  ? (write student suggestions as they happen.....)



	'Hybrid' approaches
Pros	<ul style="list-style-type: none"><li>• best of both worlds</li><li>• capture annotations at end of presentation</li></ul> <p><u>TIP</u> make sure you optimise the writing angle</p>
Cons	<ul style="list-style-type: none"><li>• worst of both worlds?</li><li>• cost</li><li>• are current classrooms compatible?<ul style="list-style-type: none"><li>• Lighting.</li><li>• screen covers blackboard</li></ul></li></ul>