Design strategies and communication · notes sheet

Name: _____ Date: _____ AQA 3.3.4 to 3.3.6

1. Design strategies

Design fixation is: _____

Three ways to avoid it: _____, _____, _____

Collaboration means: _____

Lab test: ten ideas for a lamp.	
I predict:	**What happened and why:**

2. Sketching and 3D drawing

Method	What it is	When to use it
Freehand sketch		
Isometric		
Perspective		
Rendering		

Lab test: drawing a box in 3D.	
I predict:	**What happened and why:**

3. Working drawings

Drawing	What it shows	Who uses it
Orthographic		
Exploded		
Circuit / systems diagram		
Flowchart		

Lab test: exploding a box.	
I predict:	**What happened and why:**

4. CAD and models

Model	Best for	One drawback
Card		
Foam		
CAD		
3D print		

Lab test: which model?	
I predict:	**What happened and why:**

5. Iteration and feedback

The iterative cycle: _____ → _____ → _____ → _____ → _____

Why fix problems early? _____

Lab test: the cost of a late fix.	
I predict:	**What happened and why:**

6. Quick fire

Situation	Answer
Factory needs exact sizes	
Stuck on one idea	
How flat-pack parts fit	
Realistic image for a client	
Test the feel of a handle	
Design, test, improve, repeat	

Exam question (4 marks)

Explain two benefits of using CAD to develop a design. *Tip: make a point, then link it with **so…***