WORKSHEET 06 · TOPIC 6

RenderClass: *camera, lights* & studio

A good render is a good photograph. Frame the shot, light it like a pro and save a clean, ray-traced image.

⏱ 50 MIN COMPUTER + CHROME/EDGE

N5-REN_STUDIOPRO_FILES.ZIP YOUR .DCSTUDIO PROJECT

Name _____

Class _____ Date _____

LEARNING INTENTION

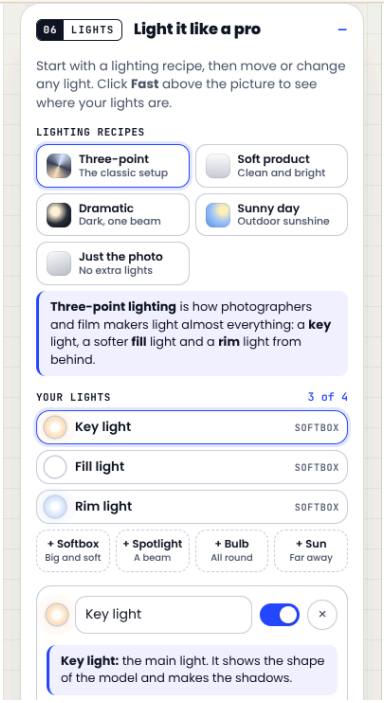
To set up the camera, lighting and studio to produce a high quality 3D CAD rendered illustration for promotion.

SUCCESS CRITERIA — I CAN…

- frame a pictorial shot using picture shape, lens and the rule of thirds
- use three-point and other lighting recipes
- choose studio, floor and save settings
- explain how lighting and render settings change the image

TASK 1 Light it like a pro

6 marks



1 Describe the job of each light in **three-point lighting**. RENDERCLASS SKILL — NOT EXAM CONTENT — 1 mark

Key light:

Fill light: — 1 mark

Rim light: — 1 mark

2 State what happens to a render as the number of **passes** increases. — 1 mark

3 A light is moved further away from the model. State what happens to its shadows. — 1 mark

4 Explain why **light bounces** should be set to 6 or more for a model with a glass lens. — 1 mark

TASK 2

Client brief — Beam torch poster

BEAM WANT A DRAMATIC POSTER IMAGE

Model	**Beam_Torch.step**
Body	Paint · **Metallic paint**, red
Tail cap	Metal · **Aluminium**
Button + grips	**Rubber**, black
Lens	Acrylic & glass · **Glass**
Bezel	Metal · **Chrome**
Sticker	**Beam_Decal_Logo.png** along the body · Shiny
Camera	Picture shape **Tall** (4:5 poster) · Lens **Portrait** · rule-of-thirds grid on
Lights	Recipe **Dramatic**
Studio	Floor **Backdrop** · dark background · Shiny floor on
Save	Quality **Good** · Light bounces **6+** · Clean up the grain ✓

STEPS

1. Load the model and paint every part (Worksheet 05 method).
2. **05 Camera**: set **Tall**, turn on the grid, choose **Portrait**. Orbit to a pictorial view with the head on a third line.
3. Click **+ Remember this view as a shot**. Find a second, different angle and remember that too.
4. **06 Lights**: choose **Dramatic**. Click **Fast** to see where the lights are.
5. **07 Studio**: choose **Backdrop**, a dark background and **Shiny floor**.
6. **08 Save**: set the brief settings, then save a picture of **each** shot.

- [ ] Tall picture, pictorial view
- [ ] Highlights and shadows clearly visible
- [ ] Glass lens looks clear
- [ ] No grain in the final image

SHOT 1

SHOT 2

Type-in version: print this box, or render digitally and hand it in with this sheet.

TASK 3 Evaluate your shots

4 marks

5 Explain which of your two shots is better for the poster. Refer to the view and the lighting. 2 marks

6 Explain how the **Dramatic** lighting recipe changes the look of the product compared with **Soft product**. RENDERCLASS SKILL — NOT EXAM CONTENT 2 marks

TASK 4 Lighting experiment

5 marks

Load your Pulse or Brew project. Render it with three different lighting recipes and complete the table.
RENDERCLASS SKILL — NOT EXAM CONTENT

RECIPE	EFFECT ON HIGHLIGHTS AND SHADOWS	BEST USED FOR…
Three-point		
Soft product		
Sunny day		

7 A pupil's render is dark, grainy and pixelated. Describe **two** ways to improve it. 2 marks

Total for knowledge questions ____ / 15

SELF-ASSESSMENT — TICK ONE BOX PER LINE (✓)

I CAN…	NOT YET	NEARLY	GOT IT
frame a pictorial shot with picture shape, lens and the grid	☐	☐	☐
set up three-point lighting and explain each light	☐	☐	☐
choose studio and save settings for a clean render	☐	☐	☐
explain how lighting and settings change the image	☐	☐	☐

One thing I will do to improve: