

2.2 Light Logic: How Light Describes Form

Name: _____ Class: _____ Date: _____

Total: 10 marks

KEY WORDS light 光 • reflected light 反光 • core shadow 明暗交界线 • cast shadow 投影 • halftone 中间调

Objective

Read the six zones of light and keep every value explainable by the **light** 光.

You must be able to:

- name the six zones of light on a form
- place the **core shadow** 明暗交界线 correctly
- keep **reflected light** 反光 darker than lit halftones
- use shadow edges to show how a form turns

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ The six zones

Highlight, light, halftone, core shadow, reflected light, and cast shadow. Every value must be explainable by the light's direction.

■ Core shadow and reflected light

The core shadow is the darkest band ON the form; reflected light bounces into the shadow but stays darker than any lit halftone.

■ Edges

Hard shadow edges mean a sharp turn or cast shadow; soft edges mean a gradual turn.

2 Practice

2.1 The darkest band of value ON the form itself is the

[1]

- **A** cast shadow
- **B** core shadow
- **C** halftone

- **D** highlight

2.2 Why must reflected light stay darker than the lit halftones? [2]

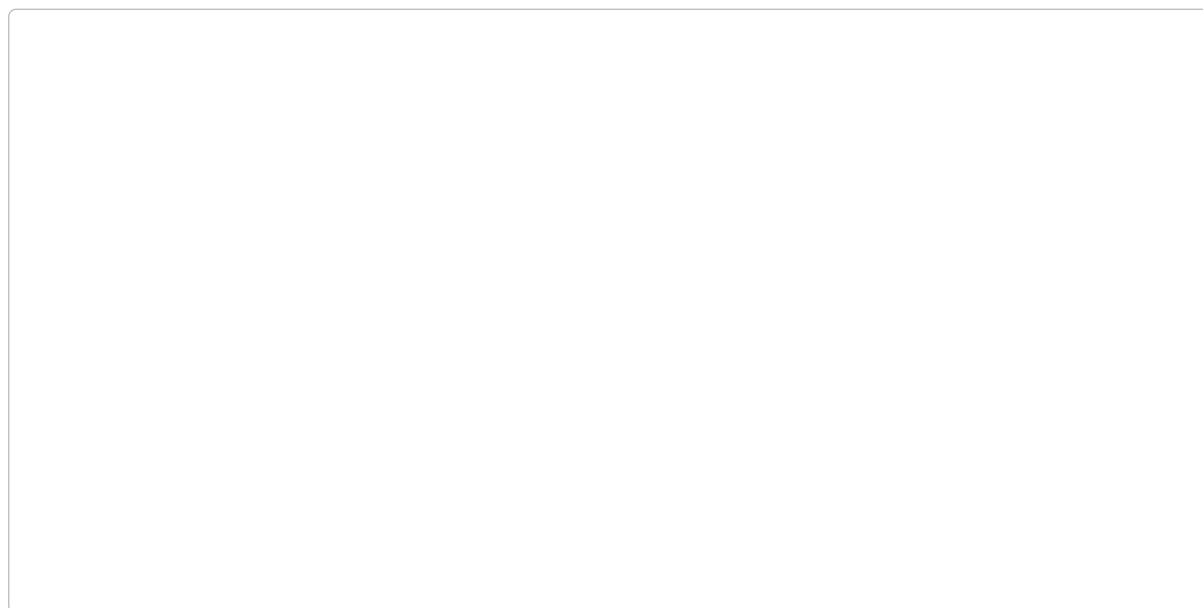
2.3 What does a hard-edged shadow tell you about the form? [1]

3 Studio & portfolio tasks

3.1 Set one lamp on a white ball or egg and make a **light-logic study**.

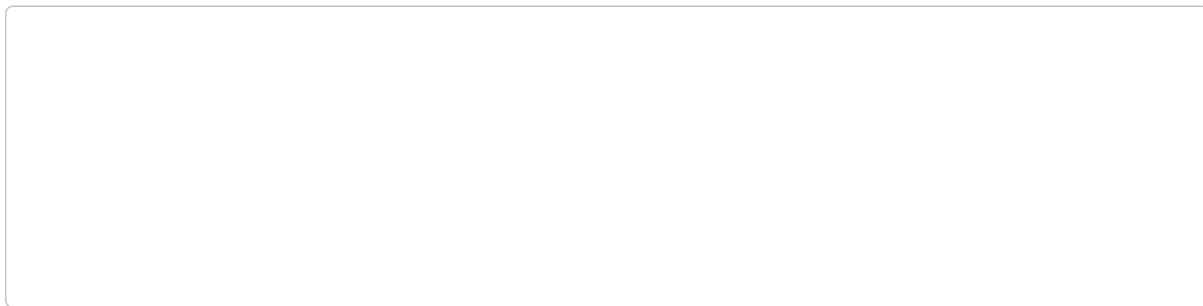
(a) Render it and label all six zones of light. [3]

(b) Check reflected light stays darker than the lit halftones. [1]



3.2

() Draw two cast shadows: one with a hard edge, one softening away from the object. [2]



Solutions

2.1 B. the **core shadow** is the darkest band on the form.

2.2 reflected light is bounced/weak; if it is as bright as the lit side, the form reads as having two light sources and breaks.

2.3 a sharp turn in the surface, or a cast shadow.

3.1 six zones present and correct; core shadow is the darkest band on the form; reflected light lifts but stays dark.

3.2 cast shadow sharp/dark at the contact point; softening and lightening with distance.