

Visual Communication Design Units 3 & 4

Chapter 6 — Fields of design practice

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Chapter 6 Fields of design practice — 6A Messages

Theory

The Study Design divides design practice into four **fields**: **Messages**, **Objects**, **Environments** and **Interactive experiences**. Most Section A questions begin by asking you to tick one field of design practice — or one named design example from within a field — in the Resource Book, and to answer with reference to that selection. The exception is the question comparing two **contemporary designers**, which carries no Resource Book tick and is answered from the designers you have studied during the year. So you must be able to recognise a field, name its typical outcomes, and describe the visual language, conventions and presentation formats that belong to it.

Messages are communicated to audiences using the **components of visual language**, and serve a variety of purposes in the context of design. The Study Design names four:

- **influencing behaviour** — persuading someone to act (a safety campaign, an advertisement)
- **educating viewers** — teaching or informing (an infographic, an exhibition panel)
- **guiding decision-making** — helping someone choose (packaging, a comparison chart, signage)
- **expressing values and ideals** — standing for what an organisation believes (a brand identity)

Naming the purpose in these terms is worth doing in almost every Messages answer. “To advertise” or “to look good” is not a purpose statement.

Typical design outcomes. Messages are embedded in projects such as **brand strategy, wayfinding, advertising and social media campaigns, visual merchandising, publications, signage, illustrations, printed collateral, and products and packaging.**

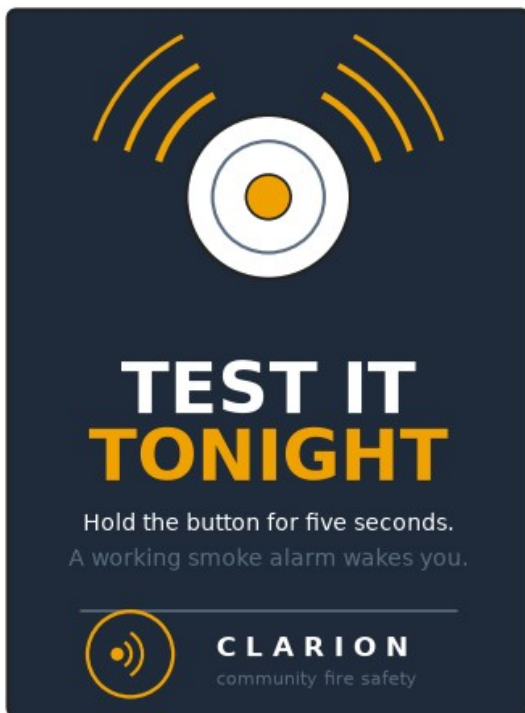


Who works in the field. Using visual language to design messages is central to the work of **communication or graphic designers, art directors, interface and web designers, illustrators**, and those working in **advertising, animation or visual effects**.

The visual language of the field. Designers of messages combine **pictorial, symbolic** and **typographic** elements to convey ideas and information by visual means. These three components are the distinguishing characteristic of the field, and naming them is what separates a field-aware answer from a generic one.

- **Pictorial** — illustration, photography and imagery that *depicts* something recognisable.
- **Symbolic** — logos, marks, icons and pictograms that *stand for* something by convention.
- **Typographic** — the letterforms themselves: headline, sub-heading, body copy, captions.

The designer then arranges these components on a two-dimensional surface or screen using the **design elements** (point, line, shape, form, tone, texture, colour, type) and the **design principles** (figure–ground, balance, contrast, cropping, hierarchy, scale, proportion, pattern).



The original poster above, for a fictional community fire-safety agency called **CLARION**, is a typical Messages outcome. Its purpose is to **influence behaviour**: to make a householder test a smoke alarm tonight. The annotated breakdown shows how the three components of visual language share that job.

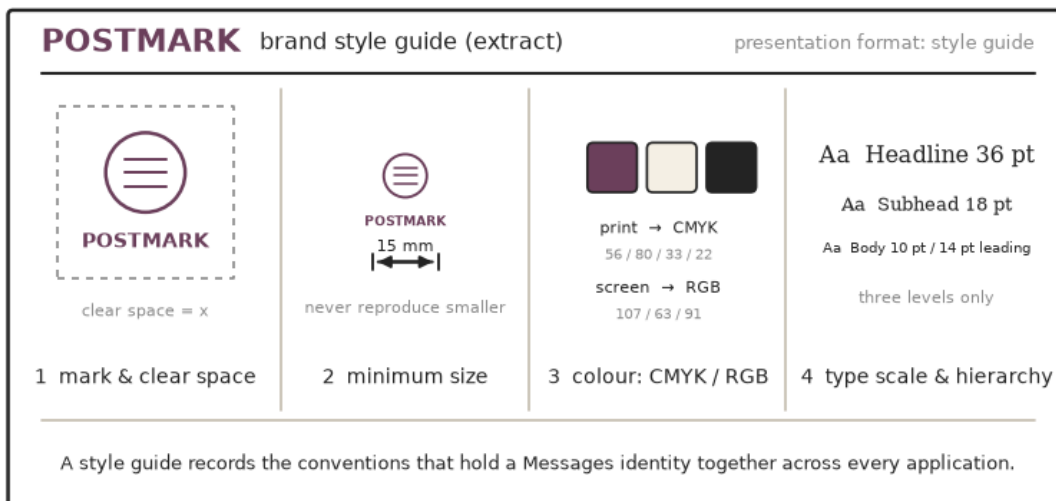


Explicit or subtle in tone. The Study Design notes that messages “can be explicit or subtle in tone and presentation”. CLARION is **explicit** — an imperative command, a saturated warning colour, maximum tonal contrast, nothing left to interpret. A brand identity is usually **subtle**: it builds an association slowly, across many touchpoints, and rarely instructs the viewer at all.

Conventions of the field. A convention is an agreed way of doing things that designers in a field follow so their work is legible, reproducible and consistent. In Messages the important ones are:

- **Typographic conventions** — a hierarchy of usually three levels (primary, secondary, tertiary); legibility (can the letterforms be told apart) and readability (is a block of text comfortable to read); alignment; and the control of **Kerning**, **tracking** and **leading**.
- **Layout conventions** — grids, columns, gutters and margins; standard trimmed formats such as the A-series and DL.
- **Identity conventions** — a **clear space** (exclusion zone) around a mark, a **minimum reproduction size**, approved colourways and a single-colour version.
- **Colour and production conventions** — **CMYK** for print and **RGB** for screen; spot colours; bleed, trim and crop marks; image resolution.
- **Signage conventions** — standardised pictograms, consistent arrow use, and tonal contrast high enough to be read at the distance the sign is viewed from.

Presentation formats characteristic of the field. A presentation format is the *form in which the resolved solution is presented* to a client or stakeholder. In Messages these include **concept boards** and mood boards, **style guides** (brand manuals), **mock-ups** (a poster shown in situ, a carton made up, a publication dummy), **storyboards**, flat print-ready artwork, screen-sized artwork, packaging nets and symbol grids.



The sheet above is an extract from a style guide for **POSTMARK**, an original stationery brand. A style guide is the presentation format that carries a Messages identity into production: it records the conventions — clear space, minimum size, colour builds for print and screen, and the type scale — so that every later application looks like the same brand.

The analytical move. For a Section A question on a Messages example, work through four steps:

1. **Name the field and the outcome type** — “a printed campaign poster in the field of Messages”.
2. **Name the components of visual language used** — pictorial, symbolic, typographic.
3. **Explain how each carries meaning** to the audience — a cause-and-effect chain, with evidence from the example.
4. **Tie the answer back to the purpose** (one of the four above) and to the audience or users.

Watch-out — context is not the presentation format. Assessors report students answering “context” questions by naming the format (“it is on a poster”). **Context** is the setting and circumstances in which a design is created, used or viewed — a station concourse, a rented flat, a community hall. The **presentation format** is how the designer showed the solution — a mock-up, a concept board, a style guide.

Watch-out — three vocabularies, kept separate. The **components of visual language** (pictorial, symbolic, typographic), the **design elements and principles**, and the **Gestalt principles** are three different lists. Naming a Gestalt principle and then discussing a design principle is a common and costly slip.

Watch-out — media is not method. The **method** is the process (drawing, photography, printing, collage); the **media** are the manual or digital applications used (ink, marker, vector illustration or layout software); the **materials** are the surfaces or substrates (paper, card, textile, a screen). Naming a software package as a “method” loses the mark. Evaluate only what is visible in the **final** solution, not the sketching that led to it.

Watch-out — fields overlap, so commit to one. A carton sits in the Study Design’s description of Messages *and* of Objects; wayfinding sits in Messages *and* in Interactive experiences. Tick one field and answer consistently within it — a Messages answer talks about what the carton *says*, an Objects answer talks about what it *is and does*.

Worked examples

Example 1 — scaffolded

Analyse the use and role of visual language in communicating the message of the CLARION poster to its audience. (4 marks)

Working	Comment
The CLARION poster is a printed campaign poster in the field of Messages . Its purpose is to influence behaviour — to make a householder test a smoke alarm tonight.	Open by naming the field, the outcome type and the purpose in the Study Design’s own terms. “To advertise” is too vague to score.
Pictorial — the illustrated smoke alarm names the object the viewer must act on, so the subject is understood before a single word is read.	Take the three components in turn and say what work each one does.
Symbolic — the amber arcs radiating from the alarm are read by convention as an audible alert, carrying the idea that the alarm must be able to <i>sound</i> .	The symbolic layer is the one students most often miss; it stands for something rather than depicting it.
Typographic — the reversed heavy sans-serif command “TEST IT TONIGHT” is primary, the instruction line is secondary, and the CLARION mark and descriptor are tertiary.	Read the whole hierarchy in layers, not just the largest feature.
Together the three components deliver a complete instruction — what to check, why it matters and who is asking — in the few seconds a passing adult householder gives a wall poster. Visual language therefore does the persuasive work of the campaign.	Close on the role of visual language: it carries the meaning and shapes the behaviour, for a named audience.

Example 2 — scaffolded

Discuss two conventions typical of the field of Messages that have been applied in the POSTMARK style guide. (4 marks)

Working	Comment
Convention 1 — clear space and minimum reproduction size. The guide rules a dashed exclusion zone of one unit (x) on all four sides of the mark and sets 15 mm as the smallest width at which it may be reproduced.	“Discuss” = identify and explain how it is used, with evidence from the example. Name the convention precisely.
A Messages identity is applied across many carriers — a letterhead, a parcel label, a shopfront window. Without these rules the mark would be crowded by neighbouring type, and at small sizes the fine cancellation lines would fill in and the mark would become an unreadable blot.	The explanation should say what would go wrong without the convention. That is the “how it is used” half of the mark.
Convention 2 — a three-level type scale. The guide specifies headline 36 pt, subhead 18 pt and body 10 pt on 14 pt leading, and states that only three levels are to	Choose a second convention from a different part of the field’s practice, not a near-duplicate of the first.

be used.

Fixing the sizes and the leading builds a consistent **hierarchy** into every future application, so a reader meeting a POSTMARK label, catalogue or web page always finds the primary information in the same relationship to the secondary and tertiary text. This is what makes the identity read as one system.

Cause and effect, in the field's own vocabulary (hierarchy, leading, application).

Example 3 — unscaffolded

Evaluate the application of methods, media and materials in the final CLARION poster. (4 marks)

The resolved CLARION poster is a digitally produced, offset-printed poster. The **method** is digital drawing and layout; the **media** are vector illustration and typesetting applications; the **material** is a large-format uncoated poster stock. The application is largely effective. Because the alarm and the arcs are drawn as flat vector shapes rather than rendered by hand, their edges stay crisp at poster scale and separate cleanly into flat process inks, so the amber holds its saturation against the dark ground. An uncoated stock suits the display context — a community hall or station noticeboard under hard overhead light — because it does not throw glare across the reversed type. The limitation is the heavy ink coverage of the dark field: on an uncoated sheet this can dry unevenly and slightly soften the fine white letterforms of the secondary instruction. Overall, because the digital media suit the flat, high-contrast artwork and the material suits the setting in which the poster is read, the methods, media and materials are applied effectively (4 marks: MMM correctly separated and named; judged in the final solution; a strength and a limitation; an overall judgement).

Example 4 — unscaffolded

Compare the CLARION poster and the POSTMARK identity as design outcomes in the field of Messages, referring to their purposes, tone and presentation formats. (6 marks)

Both are outcomes in the field of **Messages**: both combine pictorial, symbolic and typographic elements to communicate to an audience by visual means, and both rely on typographic hierarchy and strong figure-ground separation to be read quickly. Their purposes differ. CLARION exists to **influence behaviour** — a single, time-limited instruction aimed at a householder — while POSTMARK exists to **express values and ideals**, building an association with careful, hand-written correspondence over many repeated encounters. That difference drives the tone. CLARION is **explicit**: an imperative headline in a heavy sans-serif, a saturated amber against near-black, and an illustration that leaves nothing to interpretation. POSTMARK is **subtle**: a muted plum, a fine-lined symbolic mark and a restrained serif scale that suggest a quality rather than announcing one. The presentation formats follow from this. CLARION is delivered as a single finished artwork, and would be presented to the client as a **mock-up** showing the poster in its display setting, because its whole job is done in one viewing. POSTMARK is delivered as a **style guide**, because its job is to be applied consistently by other people across collateral the designer will never see — so the conventions themselves (clear space, minimum size, CMYK and RGB builds, type scale) have to be the deliverable (6 marks: congruent two-sided treatment; similarities and differences; purpose, tone and format each addressed for both examples).

Practice questions

Scaffolded

Q1. Using the CLARION poster: (a) Identify the field of design practice to which it belongs. (1 mark) (b) State the purpose of the poster, using a purpose typical of that field. (1 mark) (c) Explain how one component of visual language communicates that purpose. (2 marks)

Q2. Using the annotated breakdown of the CLARION poster: (a) Identify one pictorial, one symbolic and one typographic element. (3 marks) (b) Describe the typographic hierarchy the designer has created. (2 marks)

Q3. Using the POSTMARK style guide: (a) Name the presentation format shown. (1 mark) (b) State two things a style guide records that a finished poster does not. (2 marks) (c) Explain why a style guide is a useful presentation format for a client in the field of Messages. (2 marks)

Q4. (a) List four typical design outcomes in the field of Messages. (2 marks) (b) Name one designer role that works in this field and state one outcome that role would typically produce. (2 marks)

Q5. Distinguish between the **context** of the CLARION poster and its **presentation format**. (3 marks)

Q6. Explain what is meant by a message being **explicit** or **subtle** in tone and presentation, referring to CLARION and POSTMARK. (3 marks)

Un scaffolded



Questions 7–15 refer to the BULLETIN community publication front page shown above, unless otherwise stated.

Q7. Identify the field of design practice to which the BULLETIN front page belongs, and describe two features of the design that are typical of that field. (3 marks)

Q8. Explain how the typographic hierarchy of the front page helps a reader decide what to read first. (3 marks)

Q9. Discuss two conventions of publication design that the designer has applied to the BULLETIN front page. (4 marks)

Q10. Evaluate the choice of **materials** and **one method** used to produce the final BULLETIN publication, referring to how it reaches its readers. (4 marks)

Q11. Analyse how **pictorial** and **symbolic** elements have been used on the front page to communicate with a local readership. (4 marks)

Q12. Describe one presentation format, other than a style guide, that the designer could use to present a proposed BULLETIN masthead to the client, and justify why it suits the field of Messages. (3 marks)

Q13. Compare the way visual language is used in the CLARION poster and the BULLETIN front page to communicate with their audiences. (6 marks)

Q14. Explain how **one** technological, economic, cultural, environmental or social factor may have influenced the designer's decisions for the BULLETIN front page. (4 marks)

Q15. Explain one **legal** and one **ethical** obligation the designer of BULLETIN must meet when publishing a photograph supplied by a community member. *(4 marks)*

Q16. With reference to the POSTMARK style guide, explain why designers working in the field of Messages specify colour differently for print and for screen. *(3 marks)*

Q17. Packaging appears in the description of more than one field of design practice. Explain how a carton could be analysed as an outcome in the field of **Messages**, and what would change if it were analysed as an outcome in the field of **Objects**. *(4 marks)*

Q18. Choose **one** of the three design examples in this subtopic. Evaluate how effectively it uses the visual language and the conventions of the field of Messages to communicate to its audience. *(6 marks)*

Answers

Q1. (a) Messages. (b) To influence behaviour — to make householders test a smoke alarm. (c) See solutions. **Q2.** (a) Pictorial = the illustrated smoke alarm; symbolic = the radiating arcs (or the CLARION mark); typographic = “TEST IT TONIGHT”. (b) Primary headline, secondary instruction, tertiary agency line. **Q3.** (a) A style guide (brand manual). (b) Any two of: clear space, minimum reproduction size, CMYK and RGB colour builds, the type scale/leading. (c) See solutions. **Q4.** (a) Any four of: brand strategy, wayfinding, advertising and social media campaigns, visual merchandising, publications, signage, illustrations, printed collateral, products and packaging. (b) E.g. an illustrator — an editorial illustration. **Q5.** Context = the setting/circumstances of use (a hall, station or rented flat noticeboard); presentation format = how the solution is shown to the client (a mock-up in situ). **Q6.** Explicit = the message is stated directly (CLARION’s imperative headline); subtle = it is implied through association (POSTMARK’s restrained palette and mark). **Q7–Q18.** See fully-worked solutions.

Fully-worked solutions

Q1. (a) **Messages.** (b) To **influence behaviour** — to persuade a householder to test their smoke alarm tonight. (c) The **typographic** component carries the purpose: the imperative headline “TEST IT TONIGHT” is set in a heavy sans-serif at the largest scale and reversed out of the dark ground, so the instruction is the first thing read and states the required action directly (2 marks: *component named + a clear link from the choice to the purpose*). Accept the pictorial or symbolic component argued to the same standard.

Q2. (a) **Pictorial** — the illustrated smoke alarm. **Symbolic** — the amber arcs radiating from the alarm, read by convention as an audible alert (accept the circular CLARION mark). **Typographic** — the headline “TEST IT TONIGHT” (accept the instruction line). (b) The hierarchy has three layers: the headline is **primary**, established by the largest scale and the heaviest weight, reversed at maximum tonal contrast out of the dark ground; the instruction “Hold the button for five seconds” is **secondary** — it is reversed in the same white as the headline, so it is the sharp drop in scale and its position beneath the headline, rather than any drop in contrast, that places it at the second level; the CLARION mark, wordmark and descriptor are **tertiary**, smallest and set below a dividing rule. The eye therefore travels down the poster from command to method to source.

Q3. (a) A **style guide** (brand manual). (b) Any two of: the **clear space** required around the mark; the **minimum reproduction size**; the **CMYK build for print and the RGB value for screen**; the **type scale and leading**. A finished poster shows one fixed application; the guide records the rules behind every future application. (c) A Messages identity is applied by many hands over time — a printer, a web developer, a signwriter, the client’s own staff. A style guide is useful because it hands those people the conventions rather than a single artwork, so the mark keeps its clear space, size and colour wherever it appears and the brand continues to read as one system (2 marks: *the format’s function + why the field needs it*).

Q4. (a) Any four of: **brand strategy, wayfinding, advertising and social media campaigns, visual merchandising, publications, signage, illustrations, printed collateral, products and packaging.** (b) For example, a **communication (graphic) designer** would typically produce a brand identity and its printed collateral; an **illustrator** would produce an editorial or packaging illustration; an **art director** would direct an advertising campaign.

Q5. The **context** of the CLARION poster is the setting and circumstances in which it is viewed — displayed on a noticeboard in a community hall, a station concourse or a block of rental flats, read on foot, at a distance, in a few seconds. The **presentation format** is the form in which the designer presents the resolved solution to the client — here, a mock-up showing the poster in position, or the flat print-ready artwork. The two are frequently confused: naming the format (“it is a poster”) does not describe a context, which must refer to where, when and by whom the design is created, used or viewed (3 marks: *each term defined + applied to the example*).

Q6. A message is **explicit** when its meaning is stated directly and there is little for the viewer to interpret. CLARION is explicit: an imperative command in a heavy sans-serif, a saturated amber warning colour and a literal illustration of the object to be tested. A message is **subtle** when the meaning is implied through association rather than announced. POSTMARK is subtle: a muted plum, a fine-lined symbolic mark and a restrained serif type scale suggest care and craft in written correspondence without ever instructing the viewer. Tone is chosen to suit the purpose — behaviour change needs the explicit register, an identity that must not tire over years needs the subtle one (3 marks).

Q7. The BULLETIN front page belongs to the field of **Messages** — it is a **publication**, one of the outcomes the Study Design lists for that field. Two typical features are: (i) it combines **pictorial, symbolic and typographic** elements on a

two-dimensional printed surface — an illustrated lead image, a “FREE” badge and a masthead; and (ii) it follows the field’s **layout and typographic conventions** — a ruled masthead, a two-column grid with a gutter, and a three-level type hierarchy of masthead, headline and body copy (3 marks: *field named + two field-typical features described, not merely listed*).

Q8. The designer has built three clear levels. The **masthead** BULLETIN is set largest, in a bold serif between two rules, so the reader identifies the publication first. The **headline** “Creek trail reopens” is the next largest and the boldest item in the text area, so it is read second and tells the reader what the issue is about. The **body copy**, set small in two even columns, sits last. Because scale and weight decrease consistently down the page, the reader can decide in a glance whether to read on, without having to sample the body text (3 marks: *the levels identified + the mechanism (scale and weight) + the effect on the reader’s decision*).

Q9. Convention 1 — a column grid. The body copy is set in two even columns separated by a ruled gutter, and the columns align with the width of the lead image above them. This is a publication convention because it fixes a comfortable line length: measures that are too wide make a reader lose their place returning to the left margin, so the grid protects readability. **Convention 2 — the ruled masthead block.** The title sits between a heavy rule above and a fine rule below, with a letter-spaced strapline carrying the locality and issue number. The convention lets a returning reader recognise the publication instantly and locate the issue details in the same place every quarter (4 marks: *two conventions named, each with evidence from the example and an explanation of how it is used*).

Q10. The **material** is an uncoated recycled **newsprint** stock, and the **method** is offset printing (accept digital layout as the method with printing as the second). The choice is effective for how the publication reaches its readers. BULLETIN is a free quarterly handed out and left on counters around a small community, so it must be cheap enough to print in quantity and light enough to stack and carry; newsprint delivers both, and the recycled stock is consistent with the environmental values a community publication trades on. Offset printing suits a run of this size and holds the fine serif masthead cleanly. The limitation is that newsprint is absorbent and low in whiteness, so ink spreads slightly and the flat green and sky-blue of the illustration reproduce duller and lower in contrast than they would on a coated sheet — the designer has compensated by using large, simple flat shapes rather than fine detail. Overall the materials and method suit the distribution and the budget, so the choice is effective (4 marks: *material and method correctly named and separated; judged in the final publication; strength and limitation; judgement*).

Q11. The **pictorial** element is the illustrated lead image of the creek, the tree and the rebuilt path. Because it is drawn in flat, warm greens under an open sky rather than photographed, it reads as a friendly, local scene and gives readers an immediate, recognisable picture of the place the headline is about — building the sense that the publication is about *their* creek. The **symbolic** element is the circular “FREE” badge at the foot of the page, which by convention signals that no payment is required and that the paper may simply be taken. Together the two components tell a local reader, before any body copy is read, that the publication concerns their own neighbourhood and is theirs to pick up — a low barrier that suits a volunteer-run community title (4 marks: *both components identified with evidence + how each contributes to communicating with the named readership*).

Q12. A **mock-up** would be appropriate: the proposed masthead is printed at final size and shown in position on a made-up front page, or photographed on a bundle of papers on a shop counter. This suits the field of Messages because a masthead cannot be judged as an isolated drawing — the client needs to see it at the size and against the surrounding type, rules and stock it will actually be read on, and to check its legibility at arm’s length. A mock-up therefore tests the decision in something close to the real viewing conditions before printing is committed (3 marks: *format named and described + a justification tied to the field/viewing conditions*). Accept a concept board presenting the masthead with the type scale, colourway and a sample spread.

Q13. Both examples use the same three components of visual language, but weight them differently for different audiences. CLARION front-loads the **pictorial and symbolic**: the illustrated alarm and the radiating arcs fill the upper half of the poster and identify the object and the alert before a word is read, and the **typographic** layer beneath them is compressed to one imperative command and two short supporting lines. This suits an audience reading at a distance, on foot and in seconds, so the visual language must work before any sustained reading occurs. BULLETIN leads with the **typographic**: a serif masthead, a headline and two columns of body copy set the structure of the page, with the pictorial lead image supporting rather than replacing the words, and only one small symbolic badge. This suits a reader who has already picked the paper up and intends to read at length. Both use hierarchy and strong figure–ground separation to order the page, and both use flat, unmodulated colour rather than photographic tone; the difference is that CLARION uses visual language to *compress* one instruction into a glance, whereas BULLETIN uses it to *organise* a

large quantity of information for sustained reading (6 marks: congruent two-sided treatment; components named for each; similarity and difference; each tied to its audience).

Q14. (Model answer using the environmental factor.) The **environmental** factor has influenced the designer's decisions. The publication is printed on 100% recycled newsprint, and this material choice has shaped the visual language: because recycled newsprint is absorbent and grey rather than bright white, the designer has drawn the lead image as large flat areas of colour and set the masthead and headline in heavy serif letterforms, rather than using fine tints or delicate detail that would fill in or lose contrast on the stock. Holding the illustration to a handful of flat, unmodulated colours also keeps the page tolerant of the ink spread and slight misregistration a cheap stock invites. The factor has therefore acted on the **designer's decisions** about material, colour and typographic weight, not merely on the subject matter of the paper (4 marks: exact factor term used; a specific decision named; the influence traced to the designer's choices). Accept **economic** (a volunteer-run free quarterly with a small budget drives a single low-cost stock, a drawn illustration in place of commissioned photography, and a tightly gridded page that is quick to lay out) or **social** (a locality-based readership drives the masthead strapline, the local illustration and the plain language).

Q15. A legal obligation is **copyright**. Copyright in a photograph arises **automatically** on creation and belongs to the photographer, so the designer must obtain the copyright owner's permission or licence before reproducing the community member's photograph, and must not assume that being given a copy grants a right to publish it. An **ethical** obligation is to **acknowledge the source** and represent the subject fairly — crediting the photographer, obtaining the consent of identifiable people in the image (particularly children), and not cropping or captioning the image in a way that changes what it shows. If the photograph depicts Aboriginal or Torres Strait Islander cultural material, the designer should also follow the protocols set out in the Australian Indigenous Design Charter, which is an **ethical** framework rather than a legal one (4 marks: one legal and one ethical obligation, kept distinct and correctly classified).

Q16. Print and screen create colour by opposite means. A printed sheet such as a POSTMARK label carries **CMYK** inks that *subtract* light reflected off the substrate, while a screen *emits* light by mixing **RGB**. The two systems cannot reproduce identical ranges of colour, so a single set of values would shift — most visibly, saturated screen colours flatten when converted to ink. Specifying both a CMYK build and an RGB value in the style guide means the printer and the web developer each work to a target chosen for their own process, and the plum reads as the same brand colour on a parcel label and in an online store (3 marks: the two systems distinguished + why one specification is insufficient + the consequence for the identity).

Q17. Analysed as a **Messages** outcome, the carton is a surface that *communicates*: you would discuss its pictorial, symbolic and typographic elements, the typographic hierarchy of brand name, product descriptor and claims, the colour and imagery that signal what is inside, and the purpose of **guiding decision-making** for a shopper choosing between competing products on a shelf. Analysed as an **Objects** outcome, the same carton is a made three-dimensional thing: you would discuss its **form** rather than shape, the packaging net and how it folds, the structural performance and sustainability of the board, how it is stacked, opened and disposed of, and its usability for the person handling it. The evidence you cite and the terminology you use both change with the field, which is why the examination asks you to tick one field and answer consistently within it (4 marks: a Messages reading + an Objects reading, each with field-appropriate terminology, plus the point of difference drawn out).

Q18. (Model, using the CLARION poster.) CLARION uses the visual language and conventions of the field of Messages very effectively for its purpose of influencing behaviour. Its three components pull in one direction: the **pictorial** alarm identifies the object, the **symbolic** arcs supply the idea of an audible alert, and the **typographic** command states the action, so a viewer who reads nothing but the headline still receives a complete instruction. The field's conventions are handled well — a three-level hierarchy, a centred axis on a single column with generous margins, and tonal contrast high enough (near-white and saturated amber on near-black) for the primary message to be legible at three metres, which is the condition a wall poster is actually read in. The main limitation is the supporting line "A working smoke alarm wakes you.", set in slate grey on the near-black ground: its tonal contrast falls well below the near-white of the headline and of the instruction directly above it, and the same slate grey is used again for the "community fire safety" descriptor. The reason the viewer should act — the part that does the persuading once attention has been caught — is therefore the first thing to drop out at distance or in poor light, and an accessibility check on those two pairings would be warranted. Overall, because the components of visual language and the field's typographic and layout conventions are directed at a single, clearly named purpose for a clearly defined audience, the poster communicates effectively, with one legibility issue to resolve (6 marks: field-specific visual language and

conventions both addressed; evidence from the example; a limitation; an overall judgement). Accept a similarly evidenced evaluation of POSTMARK or BULLETIN.

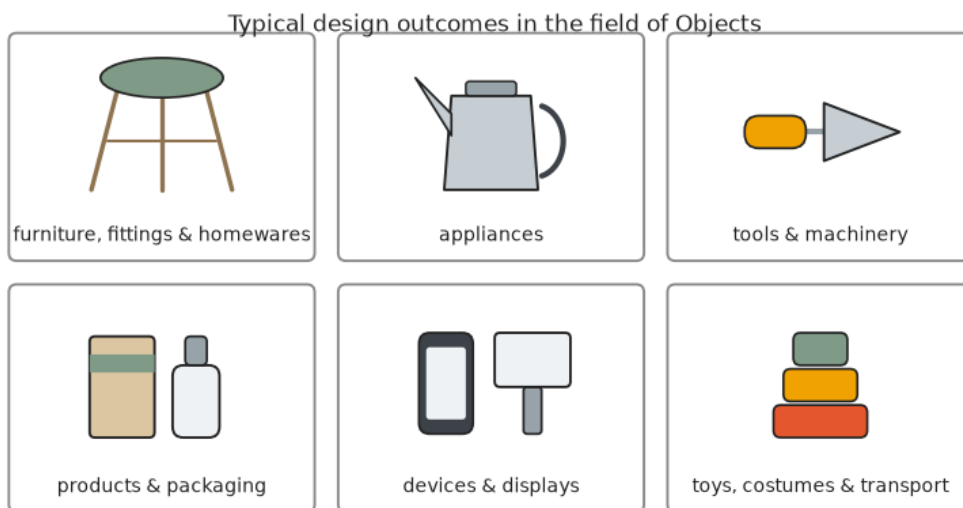
Chapter 6 Fields of design practice — 6B Objects

Theory

The Study Design divides design practice into four **fields**: Messages, **Objects**, Environments and Interactive experiences. Every Section A question begins by asking you to tick one design example from one of these fields and answer with reference to it, so you must be able to recognise an Objects example on sight, name the field's typical **design outcomes**, and describe the **visual language**, **conventions** and **presentation formats** that belong to it.

What the field is. In the field of Objects, designers “generate novel ideas for objects that are used to improve the quality of life for people, communities and societies, while also upgrading or improving existing designs”. Both halves of that sentence matter. Designers of objects invent new things, but they also *improve* things that already exist — a redesigned kettle handle that stops a user scalding their wrist is as much a design outcome as a whole new category of product.

Typical design outcomes. The Study Design lists **products and packaging, furniture, fittings and homewares, transport, appliances, tools and machinery, costumes, toys, and devices and displays.**



Who works in the field. Objects are developed by, among others, **industrial, product, graphic, furniture, jewellery, textile and fashion** designers. Graphic designers appear on that list because objects carry applied graphics — the brand on a carton, the icons beside a switch, the moulded recycling code on a base.

What designers of objects have to consider. The Study Design says the important factors “might include but are not limited to” the six below — it is an open list, not a closed one, and the terms are not unique to Objects (Environments names accessibility, usability and aesthetic appeal; Interactive experiences names aesthetic qualities and usability). What is particular to Objects is what each factor is applied *to*: a thing that is picked up, stood on, poured from or worn. Learn the terms; they are the vocabulary an Objects answer is marked in.

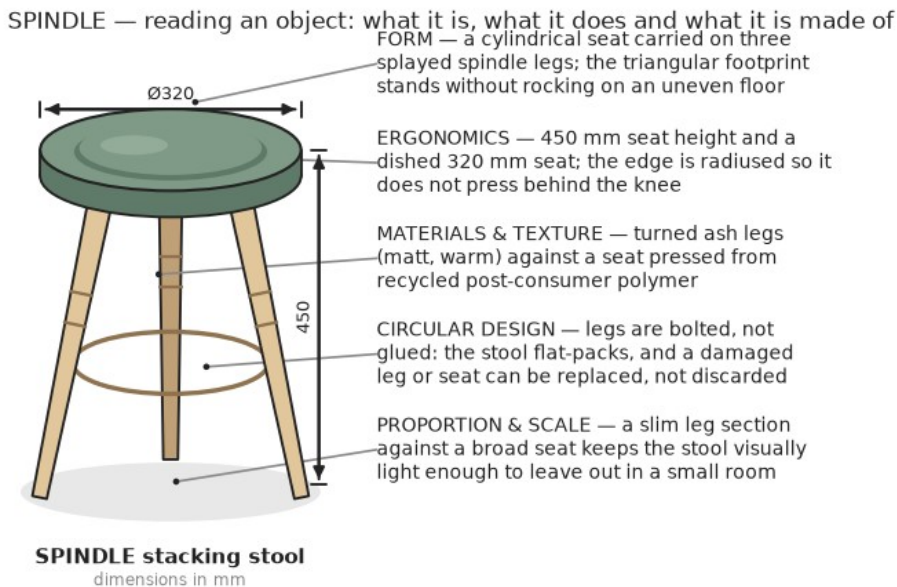
- **Human behaviour** — what people actually do with an object, as opposed to what they are supposed to do: they put it down half-full, carry it one-handed, leave it out on the bench, lose it in a garden bed.
- **Ergonomics** — fitting the object to the size, reach, strength and movement of the human body, using anthropometric data (seat heights, grip diameters, button forces).
- **The sustainability of materials and manufacturing processes** — where a material comes from, how much energy and waste the process creates, and what happens to the object at the end of its life.
- **Aesthetics** — the look and feel of the object: its form, proportion, colour, texture and finish.
- **Usability** — how easily a person can achieve their goal with the object.
- **Accessibility** — whether people across a wide range of ages and abilities can use it *at all*.

The visual language of the field. A message communicates on a surface; an object communicates as a thing you pick up, stand on, pour from or wear. Its visual language is therefore three-dimensional and tactile, and naming it correctly is what separates a field-aware answer from a generic one.

- **Form**, not shape. Shape is a two-dimensional enclosed area; **form** has depth. An object is analysed through its form, its silhouette and its profile.
- **Materials, texture and finish** carry meaning before a word is read: turned timber reads as warm and craft-made, a matt recycled polymer as honest and unpretentious, spun metal as durable and precise.
- **Colour and finish** identify the product, warn the user, brand the maker and help the object be found again.
- **Line** — the profile of the object, and the seams, parting lines and edges left by the way it was made.
- **Proportion and scale** — read against the human body rather than against a page.
- **Affordances** — the visible feature that tells a user what to do without instruction: a scallop says “put a finger here”, a raised rib says “grip”, a spout says “pour this way”.
- **Applied graphics** — moulded logos, control icons, safety marks and material codes.



The original stool above, **SPINDLE**, is a typical outcome in the field — furniture. Read as an object, it tells you what it is (something to sit on), how to use it (the dished seat and the 450 mm height), what it is made of (turned ash and a pressed recycled polymer) and something of what it is worth. The annotated breakdown below shows the decisions carrying that message.



Conventions of the field. A convention is an agreed way of working that designers in a field follow so their work can be understood, checked and made by other people. In Objects the important ones are:

- **Documentation conventions** — **third-angle orthogonal projection** (a plan and elevations laid out in a fixed relationship, marked with the projection symbol); **dimensions in millimetres**; a stated **scale ratio** (1:1, 1:2, 1:5); **line types** that each mean something (continuous thick for visible outlines, dashed for hidden edges, chain-dash for centre lines, thin for dimension and leader lines); the symbols **Ø** for diameter and **R** for radius; sections and exploded views; and a parts list.
- **Paraline conventions** — **isometric** and **planometric** drawings, in which measurements stay true along all three axes, are the standard way of showing an object or a piece of furniture in three dimensions.
- **Rendering conventions** — light, shade, shadow, reflection and cast shadow are used to describe the form and to identify the material an object is made from.
- **Ergonomic conventions** — standard human dimensions and a figure or hand shown for scale.
- **Manufacturing conventions** — wall thicknesses, draft angles, standard fixings and material identification codes, so that the drawing describes something that can actually be made.

Presentation formats characteristic of the field. A presentation format is the *form in which the resolved solution is presented* to a client or other stakeholder. The Study Design lists **documentation drawings, models, concept boards, mock-ups** and **high-fidelity prototypes**, and notes that a presentation “may be accompanied by a written rationale”. In the field of Objects that means: rendered **presentation drawings, documentation drawings, scale models, mock-ups** of a part or a finish at full size, and **high-fidelity prototypes** that emulate the look and feel of the finished product. A **low-fidelity prototype** is deliberately *not* on that list: the Study Design attaches low-fidelity prototyping to design *concepts*, “generated for the purposes of testing and critique”, so it is a development and testing tool, not a way of presenting a resolved solution. The manufacture of a *functional* prototype is not a requirement of this study.



The sheet above shows one original appliance, the **KETTLE**, in three of the field’s presentation formats, together with the low-fidelity prototype that was built while the concept was being tested. Each of the first three answers a different question for a different stakeholder: the documentation drawing tells a manufacturer how big it is; the paraline drawing lets anyone read the whole form at once; the rendered presentation drawing shows a client what it will look like in a kitchen. The fourth panel is on the sheet as a contrast — a card-and-tape prototype is made for the designer to test with, not to present a resolved solution to a stakeholder, so it is not a presentation format.

Circular design practices. Because objects are made from materials and eventually thrown away, this field carries the Study Design’s **circular design practices** more heavily than any other. Circular design “rejects the linear model of make-use-dispose”, aiming instead for outcomes that are durable, adaptable, and can be repaired, refurbished, repurposed or reused. In a design example you can see it in bolted rather than glued joints, replaceable parts, single-material construction that can be recycled without separation, and flat-packing that reduces transport volume.

The analytical move. For a Section A question on an Objects example, work through four steps:

1. **Name the field and the outcome type** — “a stacking stool, an outcome in the field of Objects”.
2. **Name the field-specific visual language used** — form, materials and texture, colour and finish, proportion and scale, affordances.
3. **Explain how each choice communicates** to the user or audience — a cause-and-effect chain, with evidence drawn from the example.
4. **Tie the answer back** to the factors the designer had to consider (ergonomics, usability, sustainability of materials, human behaviour) and to the purpose and context of the object.

Watch-out — form, not shape. **Shape** is a two-dimensional enclosed area; **form** is three-dimensional. Objects have form. Writing “the shape of the stool” in an Objects answer signals that you have not registered which field you are in, and it costs marks in questions about the design elements.

Watch-out — context is not the presentation format. **Context** is the setting and circumstances in which an object is created, used or viewed — a small rented flat, a wet garden bed, a commercial kitchen. The **presentation format** is how the designer showed the solution to a stakeholder — a rendered drawing, a scale model, a high-fidelity prototype. Naming the format does not answer a question about context.

Watch-out — methods, media and materials, in the final solution. The **method** is the process (drawing, model-making, prototyping, 3D printing); the **media** are the manual or digital applications used (pencil and marker, or three-dimensional modelling and rendering software); the **materials** are the surfaces or substrates the object is made on or from (card, timber, metal, polymer, glass, textile). Naming a software package as a “method” loses the mark — and so does naming a **manufacturing process**: pressing, casting, machining and injection moulding are how the object is *made*, not methods in the Study Design’s sense. Evaluate what is visible in the **final** object, not the sketching that led to it, and say whether the work was **digital** or **manual**.

Watch-out — the five factors act on the designer. Use the exact terms — **technological, economic, cultural, environmental, social**. “Sustainability” is the **environmental** factor; “budget” is the **economic** factor. Then explain how the factor changed a decision the *designer* made about form, material, colour or manufacture. Saying that a factor created “the need for the design” is not the same thing.

Watch-out — legal is not ethical. Copyright in the designer’s own drawings arises **automatically** on creation. A **registered design** (protecting the visual appearance of a product — its shape, configuration, pattern and ornamentation) and a **patent** (protecting how something works) must be **registered** before they exist, as must a **trade mark**. Product safety obligations are legal — and so are honest claims: overstating recycled or bio-based content is misleading or deceptive conduct under the **Australian Consumer Law**, not merely poor ethics. **Ethical** obligations are the ones that go beyond what the law compels: fair treatment of workers in the supply chain, acknowledging sources of inspiration, and following the Australian Indigenous Design Charter and ICIP protocols.

Watch-out — a specialist is not a stakeholder in general. In this field a **specialist** contributes specialist knowledge — a manufacturing or mechanical engineer, a materials scientist, a toolmaker, a model-maker, an ergonomist. The client, the retailer and the user are **stakeholders**, but they are not specialists.

Worked examples

Example 1 — scaffolded

Discuss the use and role of visual language in the SPINDLE stool in communicating to its users. (4 marks)

Working	Comment
The SPINDLE stool is an outcome in the field of Objects — furniture. Its visual language is three-dimensional: it communicates through form, materials, texture, proportion and scale rather than through a printed surface.	Open by naming the field and the <i>kind</i> of visual language it uses. This is the sentence that shows an assessor you know which field you are answering in.
Form — a broad cylindrical seat carried on three splayed legs. The dished top face and the radiused edge read immediately as a surface made to be sat on, and the three-legged base tells the user it will stand without rocking on an uneven floor.	Use form , never “shape”. Then say what the form <i>tells the user</i> , not merely what it looks like.
Materials and texture — turned ash legs, matt and warm to the touch, against a seat pressed from recycled post-consumer polymer. The timber signals craft and durability; the flecked polymer is left unpainted so the recycled content is visible rather than disguised.	Materials do the work that colour and imagery do in a message. Name the material and the meaning it carries.
Proportion and scale — a slim leg section against a broad seat keeps the stool visually light, and the 450 mm height and 320 mm seat are set against the dimensions of a seated adult.	Proportion in this field is read against the human body. Quote the evidence from the example.
The role of visual language here is to make the object self-explanatory: a user understands how to use the stool, what it is made from and how it should be treated without any instruction, label or packaging.	Close on the role — what visual language achieves for the user. “Discuss” needs both the identification and this explanation of how it is used.

Example 2 — scaffolded

Discuss two conventions applied in the KETTLE documentation drawing that are characteristic of the field of Objects. (4 marks)

Working	Comment
Convention 1 — third-angle orthogonal projection. The plan sits directly above the front elevation, aligned on a common centre line, and the third-angle projection	“Discuss” = identify and explain how it is used, with evidence. Name the convention precisely; “a technical drawing” is not a convention.

symbol is placed on the sheet.

The arrangement is not decorative. Because the views are locked in a fixed relationship, a manufacturer can project a feature from one view into the other and be certain the spout position on the plan is the same spout shown on the elevation. The symbol tells a reader anywhere in the world which of the two projection systems the sheet uses, so the views are not read in mirror image.

Convention 2 — dimensioning to a stated scale. The drawing is labelled SCALE 1:5, all dimensions are given in millimetres, and the body is dimensioned Ø160 using the diameter symbol, with the body height given as 240.

A drawing may be printed, photocopied or viewed at any size, so a manufacturer never measures the drawing itself — they read the figures. Stating the units and the scale, and using Ø to declare that 160 is a diameter rather than a radius or a width, removes the ambiguity that would otherwise produce a kettle of the wrong size.

Explain what would go **wrong** without the convention. That is the “how it is used” half of the marks.

Choose a second convention from a different part of the field’s practice, not a near-duplicate of the first.

Cause and effect, in the field’s own vocabulary. Note that the mark is for the *reason* the convention exists.

Example 3 — unscaffolded

Explain why a designer of objects would present the KETTLE using more than one presentation format, referring to the stakeholders each format serves. (4 marks)

No single format can answer every stakeholder’s question about a three-dimensional object, so the designer produces several. The **documentation drawing** is prepared for the **manufacturer**: it is a third-angle orthogonal projection carrying dimensions in millimetres, a scale and a projection symbol, and it answers the only question a manufacturer has — exactly how big is each part and where does it sit. The **rendered presentation drawing** is prepared for the **client**: it uses light, shade and shadow to describe the spun aluminium body and the matt nylon handle, so the client can judge how the appliance will look on a benchtop and approve the aesthetic before any tooling is paid for. A **high-fidelity prototype**, made in the resolved materials and finish, is prepared for the **retail buyer**: no drawing can be lifted, so it is the only format that lets a buyer judge the weight, the balance and the feel of the handle in the hand before committing to an order. Together the formats let the object be approved, ordered and made, because each one is matched to the decision a particular stakeholder has to make. Note that the low-fidelity prototype on the same sheet is **not** a presentation format and should not be offered as one: it belongs to the testing and critique of the concept, not to the presentation of the resolved solution (4 marks: more than one format named correctly; each tied to a specific stakeholder; a reason why one format is insufficient).

Example 4 — unscaffolded

Evaluate the extent to which the KETTLE reflects conceptions of good design, referring to a named conception of good design. (6 marks)

Judged against Dieter Rams’ **Ten Principles for Good Design** — a conception developed by an industrial designer and therefore well suited to this field — the KETTLE succeeds on most counts. Rams holds that good design **makes a product useful** and is **understandable**: the KETTLE’s form is entirely self-explanatory, with a spout that shows the direction of pouring, a lid the diameter of the body so it can be filled and cleaned without instruction, and a D-handle set clear of the hot wall. It is **unobtrusive** and **as little design as possible** — a plain tapered cylinder with no applied styling, so it will sit in a kitchen of any character without competing with it. It is **honest**: the spun aluminium is left as spun rather than finished to imitate a more expensive material, and the recycled content is stated rather than hidden. It is **environmentally friendly** and **long-lasting**: recycled aluminium is used for the body, and the glass-filled nylon handle is bolted rather than bonded, so it can be replaced instead of condemning the whole appliance — consistent with **circular design practices**.

The design is weaker on Rams' principle that good design is **thorough down to the last detail**. The uninsulated metal body reaches the temperature of the water inside it, so a user who grasps the body rather than the handle — which is what people reaching for a kettle in a hurry actually do — will be burnt; a heat-shielded or double-walled body would resolve this. The bare metal exterior will also hold fingerprints, which works against the plain aesthetic in use.

Overall, the KETTLE reflects conceptions of good design to a considerable extent: it is useful, understandable, honest and repairable, and the aesthetic follows from those decisions rather than being applied over them. Its shortfall is one of thoroughness in use rather than of intent, and it is resolvable (*6 marks: a named conception; several principles applied with evidence from the example; a limitation; an overall judgement*).

Practice questions

Scaffolded

Q1. Using the SPINDLE stool: (a) Identify the field of design practice to which it belongs. (*1 mark*) (b) Using the Study Design's terms, name the category of design outcome to which it belongs. (*1 mark*) (c) Name two designer roles that work in this field, and state one outcome each would typically produce. (*2 marks*)

Q2. Using the annotated breakdown of the SPINDLE stool: (a) State the seat height and the seat diameter given on the drawing. (*1 mark*) (b) Explain how **ergonomics** influenced these two dimensions. (*2 marks*) (c) Describe one feature of the stool that responds to **human behaviour** rather than to ergonomics, and explain the difference. (*2 marks*)

Q3. Using the SPINDLE stool: (a) Name the aesthetic of the stool. (*1 mark*) (b) Identify one design element and one material choice that create it. (*2 marks*) (c) Explain how that aesthetic suits the context in which the stool is likely to be used. (*2 marks*)

Q4. Using the KETTLE sheet: (a) Name the four ways the kettle is shown, and state which one of them is **not** a presentation format. (*2 marks*) (b) State two drawing conventions visible on the documentation drawing, other than the projection system and the scale, and state what each records. (*2 marks*) (c) Explain why the low-fidelity prototype was made at full size. (*2 marks*)

Q5. (a) Distinguish between the design elements **shape** and **form**. (*2 marks*) (b) Name one other design element that carries more of the communication in the field of Objects than in the field of Messages, and explain why. (*2 marks*)

Q6. (a) Distinguish between **usability** and **accessibility**. (*2 marks*) (b) With reference to the KETTLE, describe one decision that improves usability and one that would improve accessibility. (*2 marks*)

Unscaffolded



Questions 7–16 refer to the TROWEL planting tool shown above, unless otherwise stated.

Q7. Identify the field of design practice to which the TROWEL belongs, and describe two features of the design that are typical of that field. (*3 marks*)

Q8. Analyse how the designer has used **form** and **colour** to make the TROWEL easy to grip in use and easy to find when it is put down in a garden bed. (*4 marks*)

Q9. Explain how **scale** and **proportion** have been used in the TROWEL, and how each relates to the human hand. (*4 marks*)

- Q10.** Evaluate the application of **methods, media and materials** in the final TROWEL. *(4 marks)*
- Q11.** Explain the role of one **specialist** the designer of the TROWEL would work with, and describe what that specialist contributes to the resolution of the design. *(3 marks)*
- Q12.** Explain how **one** technological, economic, cultural, environmental or social factor may have influenced the designer's decisions for the TROWEL. *(4 marks)*
- Q13.** Explain one **legal** and one **ethical** obligation the designer of the TROWEL must meet before it is manufactured and sold. *(4 marks)*
- Q14.** Distinguish between the **context** in which the TROWEL is used and the **presentation format** a designer would use to show it to a client. *(3 marks)*
- Q15.** Discuss how the TROWEL reflects **circular design practices**, and describe one further change that would extend its life. *(4 marks)*
- Q16.** Evaluate the usefulness of a **low-fidelity prototype** and a **high-fidelity prototype** for testing the TROWEL, referring to what each can and cannot tell the designer. *(4 marks)*
- Q17.** Compare the SPINDLE stool and the TROWEL as design outcomes in the field of Objects, referring to their users, the factors each designer had to consider, and their materials. *(6 marks)*
- Q18.** Choose **one** of the three original objects in this subtopic. Evaluate how effectively its visual language communicates its function and its quality to the person who will use it, referring to at least two design elements and one convention of the field. *(6 marks)*

Answers

Q1. (a) Objects. (b) Furniture, fittings and homewares. (c) E.g. a furniture designer — a chair or stool; an industrial/product designer — an appliance. **Q2.** (a) 450 mm seat height; Ø320 mm seat. (b) Both are set from anthropometric data for a seated adult. (c) E.g. the flat-packing/replaceable parts, or the visual lightness that means the stool is left out rather than stored. **Q3.** (a) Natural/honest/quietly crafted (accept warm, understated, Scandinavian-influenced). (b) E.g. the element of texture (matt turned timber) + the recycled post-consumer polymer seat. (c) See solutions. **Q4.** (a) Documentation (third-angle orthogonal) drawing; paraline (isometric) drawing; rendered presentation drawing; low-fidelity prototype — the prototype is **not** a presentation format (it is a testing tool). (b) Any two of: the Ø diameter symbol; dimensions in millimetres; the chain-dash centre line; the dimension lines with their arrowheads and end ticks; the projection link between views. (c) See solutions. **Q5.** (a) Shape = a two-dimensional enclosed area; form = three-dimensional, having depth. (b) E.g. texture — an object is touched as well as seen. **Q6.** (a) Usability = how easily a person can achieve their goal; accessibility = whether people across a wide range of abilities can use it at all. (b) See solutions. **Q7–Q18.** See fully-worked solutions.

Fully-worked solutions

Q1. (a) **Objects.** (b) **Furniture, fittings and homewares.** (c) A **furniture designer** would typically produce a chair, stool, table or storage unit; an **industrial or product designer** would typically produce an appliance, a tool or a device. Accept jewellery, textile or fashion designers with an appropriate outcome (*1 mark per role correctly paired with an outcome*).

Q2. (a) The seat height is **450 mm** and the seat diameter is **Ø320 mm**. (b) **Ergonomics** is the fitting of an object to the size, reach and movement of the human body. Both dimensions come from anthropometric data for a seated adult: 450 mm is the height at which an average adult's feet reach the floor with the thigh roughly horizontal, so the seat does not press on the underside of the leg, and Ø320 mm is wide enough to support the seat bones while remaining narrow enough that the user can move a leg either side without the edge catching. The radiused edge follows from the same data — it prevents a hard edge pressing behind the knee (*2 marks: the dimensions linked to specific human measurements*). (c) **Human behaviour** describes what people actually do with an object rather than the size of their bodies. The stool's **visual lightness** — a slim leg section against a broad seat — responds to the behaviour of people in small homes, who leave a stool out where it is used rather than storing it after every use; a visually heavy stool would be resented in a small room. Accept the bolted construction, which responds to the fact that people move house and flat-pack furniture rather than carrying assembled stools. The difference is that ergonomics sets the *dimensions*, whereas human behaviour shapes decisions about how the object will be *lived with* (*2 marks: a feature identified + the distinction drawn*).

Q3. (a) A *natural, honest, quietly crafted* aesthetic (accept warm, understated, restrained). (b) The **element of texture** — the matt, close-grained turned ash of the legs, with the turned bands left visible — and the **material** choice of a flecked recycled post-consumer polymer for the seat, left unpainted. (c) The stool is likely to be used in a small home or a shared kitchen, a setting in which it is seen every day and at close range rather than glanced at once. A restrained, natural aesthetic suits that context because it does not tire the eye over years of daily use, it sits comfortably beside timber furniture the owner already has, and the visible recycled content and exposed timber grain read as honest to an owner who chose the stool partly on environmental grounds. A saturated, high-gloss treatment would compete for attention in a room where the object is meant to recede (*2 marks: context described as a setting of use + the aesthetic linked to it*).

Q4. (a) A **documentation drawing** (third-angle orthogonal projection); a **paraline** drawing (isometric); a **rendered presentation drawing**; and a **low-fidelity prototype**. The one that is **not** a presentation format is the **low-fidelity prototype**: the Study Design attaches low-fidelity prototyping to the testing and critique of design *concepts*, and names documentation drawings, models, concept boards, mock-ups and high-fidelity prototypes as the formats a *resolved solution* is presented in. (b) Any two of: the **Ø diameter symbol**, which records that the 160 figure is a diameter and not a width or a radius; **dimensions given in millimetres**, which records the unit so no conversion is guessed at; the **chain-dash centre line**, which records the axis of a symmetrical form and locates the views against one another; the **dimension lines**, drawn thin with an arrowhead and an end tick at each limit, which record exactly which two points a figure is measured between. (c) The purpose of the low-fidelity prototype is to test the object against a human body, and a body cannot be scaled. Made at full size from card, tape and dowel, it lets the designer and a user actually take hold of the handle and check that the knuckles clear the hot wall, that the balance is right

when the kettle is full, and that the grip diameter suits a range of hand sizes. A scale model would look correct but could answer none of those questions (2 marks: the testing purpose + why full size is required).

Q5. (a) **Shape** is a two-dimensional enclosed area, defined by a line or a change of colour or tone on a flat surface. **Form** is three-dimensional: it has depth as well as height and width, it is described by light, shade and shadow, and it can be viewed from more than one side. A poster uses shape; the SPINDLE stool has form. (b) **Texture** carries more of the communication in the field of Objects. In a message, texture can only be *depicted* on a flat surface, but an object is touched as well as seen, so its actual texture — the matt warmth of turned timber against the slight tooth of a pressed recycled polymer — tells the user what the object is made of, how much it is worth and whether it will be slippery in the hand. Accept **form** or **colour** argued to the same standard (2 marks: element named + a reason specific to three-dimensional objects).

Q6. (a) **Usability** is how easily and efficiently a person can achieve their goal with an object — how quickly and with how few errors. **Accessibility** is whether people across a wide range of ages, sizes and abilities can use the object at all. A design can be highly usable for the average adult and still be inaccessible. (b) A decision that improves **usability**: the lid is the full diameter of the body, so a user can fill and clean the kettle without navigating a narrow opening. A decision that would improve **accessibility**: the uninsulated metal body should be heat-shielded or double-walled, and the handle given a larger, softer grip section, so that a user with reduced grip strength or reduced heat sensitivity in the hands can lift a full kettle safely. Accept a sight-line to the water level, or a lower lifting weight, argued to the same standard (2 marks: one of each, correctly classified).

Q7. The TROWEL belongs to the field of **Objects** — it is a hand tool, one of the categories (“tools and machinery”) the Study Design lists for that field. Two typical features are: (i) it is a **three-dimensional form** made from more than one **material**, each chosen for what it must do — a stainless steel blade that must stay rigid and not corrode in wet soil, and a moulded bio-based polymer grip that must be warm and comfortable in the hand; and (ii) its **ergonomics** are visible in the design — the grip is contoured with three finger scallops and a thumb rest, so the object is shaped around the hand that will hold it (3 marks: field named + two features described as features of that field, not merely listed).

Q8. The designer has used **form** and **colour** to solve two different problems. The **form** of the grip is a swollen, rounded section with three scallops moulded into its lower edge and a recessed thumb rest on the upper face. These are **affordances**: they position the hand without instruction, so the fingers fall into the scallops and the thumb sits along the axis of the blade, letting the user push down into soil without the tool twisting. The wide section also spreads the load across the palm rather than concentrating it on a narrow bar, which matters because a planting tool is pushed against resistance many times in a session. The **colour** — a saturated amber against the near-neutral steel of the blade — is chosen for a different reason. The context of use is a garden bed: soil, mulch and foliage are dark, low-saturation greens and browns, so an amber grip separates strongly from that background by both hue and tone and can be seen when the tool is put down among plants. The two choices divide the work: form makes the tool usable in the hand, and colour makes it findable when it is not (4 marks: both elements named; each analysed as a contribution to a specific outcome; evidence from the example; the context of use taken into account).

Q9. **Scale** is the size of the object relative to something else — here, relative to the human hand and to the plants it is used among. The TROWEL is 300 mm overall, so it is a one-handed tool sized to be swung from the wrist and elbow rather than the shoulder, and it can work between established plants without disturbing them. **Proportion** is the relationship of the parts to each other and to the whole. Roughly a third of the overall length is grip and two-thirds is blade, and the grip section is noticeably deeper than the blade is thick. That proportion puts the balance point close to the ferrule, so the tool does not feel blade-heavy when it is held at rest, and it gives the hand a section thick enough to hold firmly without the wrist having to close tightly. Both are read against the body: in the field of Objects, scale and proportion are judged against the user rather than against a page (4 marks: both terms correctly defined and distinguished; each applied to the example with evidence; each related to the hand).

Q10. The **method** by which the final TROWEL is presented is **digital drawing** — a rendered presentation drawing, produced digitally rather than by hand; the **media** are digital, being three-dimensional modelling and rendering applications rather than manual pencil and marker; the **materials** are stainless steel for the blade and ferrule and a bio-based polymer for the grip. (Pressing and injection moulding are **manufacturing processes**, not methods in the Study Design’s sense — offering them as the method loses the classification marks.) The application is largely effective. Digital drawing is the right method for an outcome of this kind: rendering describes the compound curvature of the grip and the dished blade in a way a flat manual sketch could not, and it carries the exact amber against the neutral

steel so the colour decision can be judged before any tooling is cut, while the drawing still records what a maker needs — 300 mm overall, two materials and a through-bolt at the ferrule. The **materials** are matched to what each part must do. The blade is stainless steel formed into a dished cross-section with a central rib that stiffens it without adding thickness, so it resists bending in compacted soil and will not rust when the tool is left out in the wet; the grip is a moulded polymer, which takes the scallops, thumb rest and hang hole in one operation and is warm and forgiving in the hand where bare steel would not be. The limitation is in the material rather than the method: a bio-based polymer is not the same as a durable one, and exposed to ultraviolet light on an outdoor shelf for several seasons it may chalk and become brittle, and it cannot be repaired if it splits. Overall, because the method and media describe the object precisely enough for it to be both made and judged, and the materials are matched to what each part must actually do, methods, media and materials have been applied effectively (4 marks: *MMM correctly separated and named; judged in the final object rather than the ideation; a strength and a limitation; an overall judgement*).

Q11. The designer would work with a **manufacturing (tooling) engineer** or **toolmaker**. This specialist contributes specialist knowledge the designer does not have: how the moulded grip must be shaped so that it can actually be made. They advise on wall thickness so the part cools without sinking, on draft angles so it will release from the tool, on where the parting line and the ejector pins can sit so they do not fall under the user's fingers, and on how the through-bolt boss must be reinforced so it will not split. Their contribution changes the resolved design — the form the designer draws is adjusted so that it is manufacturable at the required cost and quantity. Accept a **materials scientist** (specifying a bio-based polymer with adequate ultraviolet stability), an **ergonomist**, or a **model-maker**. Note that the client, the retailer and the gardener who buys the tool are **stakeholders** but are not specialists (3 marks: *an appropriate specialist named + the specialist knowledge described + its effect on the resolution of the design*).

Q12. (Model answer using the technological factor.) The **technological** factor has influenced the designer's decisions. The availability of injection moulding is what makes the grip of this tool possible: a contoured section with three finger scallops, a recessed thumb rest and an integral hang hole is a compound three-dimensional form that could not be produced by hand at a mass-market price, but it forms in a single moulding operation. Because the designer knew the grip would be moulded, they were free to shape it purely around the hand rather than around what could be turned or carved, and they placed the parting line along the upper edge where the palm does not close on it. The same factor shaped the **colour** decision: a pigment can be mixed through the polymer at moulding, so the amber runs right through the part and cannot chip or wear off the way a painted finish on a turned timber handle would. The factor has therefore acted on the **designer's decisions** about form, detail and colour, not merely on the reason the tool exists (4 marks: *the exact factor term used; at least two specific decisions named; the influence traced to the designer's choices*). Accept **economic** (a competitive price point for a mass-market hand tool drives a two-part construction, a single moulded grip and a pressed rather than a forged blade) or **environmental** (the choice of a bio-based polymer and an unfinished stainless blade that needs no plating).

Q13. A **legal** obligation is to comply with the **Australian Consumer Law** and to respect **intellectual property**. The tool must be safe for its intended use, and every claim made about it must be accurate: describing the grip as “bio-based” when it is not, or overstating its recycled or renewable content, is misleading or deceptive conduct under that law — greenwashing is a legal breach and not merely a lapse of ethics. If the designer wishes to protect the appearance of the grip, a **registered design** does not exist until it is **registered** with IP Australia, and disclosing the design publicly before applying can destroy the novelty the registration depends on — unlike **copyright** in the designer's own drawings, which arises **automatically** on creation and requires no registration at all. A **patent**, protecting how something works, must likewise be registered. Equally, the designer must not copy a competitor's registered design or patented mechanism. An **ethical** obligation is one the law does not compel: to satisfy themselves that the workers who mould and assemble the tool are paid and treated fairly, even where the tooling is placed in a jurisdiction whose law does not require it, and to acknowledge the sources the design draws on. Following the Australian Indigenous Design Charter and ICIP protocols, if Aboriginal or Torres Strait Islander knowledge or motifs were drawn on, is an **ethical** framework of the same kind — a protocol the designer chooses to be bound by rather than a statute (4 marks: *one legal and one ethical obligation, kept distinct and correctly classified, with the registration point handled accurately*).

Q14. The **context** of the TROWEL is the setting and circumstances in which it is used: outdoors in a garden bed or a community plot, in wet soil and mulch, often in cold or wet weather, sometimes with gloved or muddy hands, then put down among foliage and picked up again — and stored in a shed or on a hook, not in a drawer. That context is what drove the corrosion-resistant blade, the high-visibility grip and the hang hole. The **presentation format** is the form in which the designer shows the resolved solution to a client — for this tool, a **rendered presentation drawing** showing

the finish and colourway, a **high-fidelity prototype** that can be held, or a **concept board** pairing the two with a written rationale. The two are commonly confused: naming the format (“it is shown as a rendering”) does not describe a context, which must state where, when, by whom and under what conditions the object is used (*3 marks: each term defined + applied to the example, and the distinction made explicit*).

Q15. The TROWEL reflects **circular design practices** in several ways. It rejects the make-use-dispose model by being made from two separable parts joined by a single **through-bolt**: the blade can be unbolted from the grip, so a bent blade or a split grip can be replaced rather than the whole tool being thrown out, and at end of life the steel and the polymer can be separated for recycling instead of going to landfill as a bonded composite. The materials themselves are chosen for **durability** — stainless steel will not corrode in wet soil, so the tool is designed to last many seasons — and the grip is a **bio-based** rather than a petroleum-derived polymer. The hang hole supports the same aim by encouraging storage under cover.

One further change: the polymer grip is the part most likely to fail first, through ultraviolet degradation on an outdoor shelf. The designer could mould it from a single, clearly identified and widely recycled polymer with an ultraviolet stabiliser and a moulded resin identification code, and offer replacement grips as a spare part, so that the failure of the shortest-lived component does not end the life of the whole tool. Accept a take-back or resharpener service argued to the same standard (*4 marks: circular design correctly understood as extending life and retaining value; at least two features discussed with evidence; a specific, justified improvement*).

Q16. The two prototypes answer different questions, and both are useful at different points. A **low-fidelity prototype** — the grip carved from foam or built up in card and tape on a length of dowel — is cheap and quick, so the designer can make six variations in an afternoon and have several gardeners hold each one. It can tell the designer whether the section is too thick for a small hand, whether the scallops fall where the fingers actually sit, and where the balance point should be. It cannot tell the designer anything about the finish, the colour, the weight of the real materials or how the tool behaves under load, because it is not made of what the tool is made of. A **high-fidelity prototype** uses materials and techniques that emulate the look and feel of the finished product, so it can be photographed for a client, judged for colour and surface texture, and tested for whether the grip is slippery when wet. Its limitations are that it is slow and expensive to make, so only one or two variations are viable, and it arrives late — by the time it exists, the ergonomic decisions it might have challenged have already been committed. The useful sequence is therefore low fidelity first, to settle the form against real hands, and high fidelity afterwards to confirm the resolved appearance; using only the high-fidelity prototype risks resolving the finish of a grip that does not fit (*4 marks: both prototypes correctly defined using the Study Design’s terms; what each can and cannot establish; a judgement about their usefulness*).

Q17. Both are outcomes in the field of **Objects**, and both communicate through the same three-dimensional visual language — form, materials, texture, colour and proportion read against the human body rather than on a printed surface. Both are also designed around **ergonomics** and **circular design practices**: each is dimensioned from human measurements, and each is assembled with a mechanical fixing (bolted legs, a bolted blade) so that a damaged part can be replaced rather than the whole object discarded.

Their **users** and contexts differ, and this drives everything else. SPINDLE is domestic furniture, used indoors, passively, by a seated adult who is not thinking about the object at all; its ergonomic problem is a static one of height and seat area, solved at 450 mm and Ø320 mm. The TROWEL is a hand tool used outdoors, actively and repeatedly, against resistance; its ergonomic problem is a dynamic one of grip, balance and load through the palm, solved with a contoured section, finger scallops and a thumb rest.

The **factors** each designer weighted therefore differ. For SPINDLE the dominant concerns are **aesthetics** and **human behaviour** — the stool is on show in a small room every day, so it must be visually light enough to be left out. For the TROWEL, **usability** and **accessibility** dominate over appearance, and to those is added findability in a visually cluttered setting, which is why the grip is a saturated amber rather than a quiet neutral.

Their **materials** follow from the same logic. SPINDLE pairs turned ash — warm, matt and pleasant to touch indoors — with a pressed recycled polymer seat, chosen partly for the honest, visibly recycled look it gives an object that will be seen daily. The TROWEL pairs stainless steel — chosen for rigidity and corrosion resistance in wet soil, where timber would swell and mild steel would rust — with a moulded bio-based polymer grip. In short, both apply the same field-specific visual language and the same circular thinking, but SPINDLE’s decisions are led by how the object will

be lived with, and the TROWEL's by how it will be worked with (6 marks: a congruent two-sided treatment; similarities and differences; users, factors and materials each addressed for both examples).

Q18. (Model, using the TROWEL.) The TROWEL communicates its function and its quality to its user very effectively. The **element of form** does most of the work: the swollen, scalloped grip and the dished blade tapering to a planting point are read instantly as “hold here” and “push into soil here”, so a shopper who has never seen this tool before knows how to hold it before picking it up. The **element of colour** does the second job — the saturated amber of the grip separates in both hue and tone from the dark greens and browns of a garden bed, so the tool can be found again after it has been put down, and it separates from the neutral steel so the eye reads grip and blade as two different things with two different purposes. The field's **convention** of pairing materials to function is honoured and is visible in the object: stainless steel where rigidity and corrosion resistance are needed, a warm moulded polymer where the hand goes, and a visible through-bolt at the ferrule that both declares the tool is repairable and reassures the user that the blade will not pull out of the handle. That exposed fixing is a quality signal in its own right.

The limitation lies in the same colour decision that makes the tool findable. A saturated amber grip is a strong, slightly toy-like statement, and against the tool's otherwise restrained detailing it may read to some buyers as inexpensive rather than durable — a lower-chroma but still high-contrast colour would hold the findability while reading as more serious. The moulded “TROWEL” mark on the blade is also low in tonal contrast and will disappear entirely once the blade is used.

Overall, because the form states the function without instruction, the colour is chosen from the context in which the tool is actually used, and the construction is legible as repairable, the visual language communicates function and quality effectively, with one reservation about how the colour reads at the point of sale (6 marks: at least two elements and one convention of the field addressed with evidence; function and quality both treated; a limitation; an overall judgement). Accept a similarly evidenced evaluation of SPINDLE or the KETTLE.

Chapter 6 Fields of design practice — 6C Environments

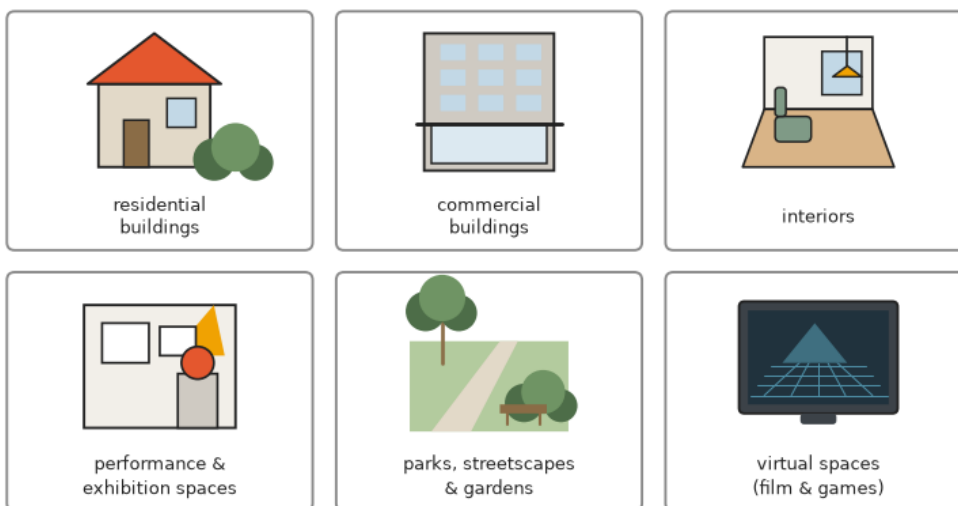
Theory

The Study Design divides design practice into four **fields**: Messages, Objects, **Environments** and Interactive experiences. Most Section A questions begin by asking you to tick one field, or one design example from one of these fields, and answer with reference to it; the exception is the contemporary-designers question, which you answer from your own year of study with no tick. So you must be able to recognise an Environments example on sight, name the field's typical **design outcomes**, and describe the **visual language**, **conventions** and **presentation formats** that belong to it.

What the field is. In the field of Environments, designers “generate ideas for the indoor, outdoor and virtual spaces in which we live, work and play”. Three words in that sentence do a lot of work. **Indoor** covers interiors, from a single room to a whole exhibition. **Outdoor** covers gardens, parks and streets. **Virtual** covers the spaces built for films and video games — which is why a concept artist belongs in this field just as much as an architect does. What unites them is that the outcome is a **space a person is inside**, not an image they look at or an object they pick up.

Typical design outcomes. The Study Design lists **residential and commercial buildings, interiors, performance and exhibition spaces, parks, streetscapes and gardens**, and adds that designers of environments “can also be responsible for the environments we see in films and video games”.

Typical design outcomes in the field of Environments



Who works in the field. Environments are designed by **architects, landscape architects, urban designers, interior designers and stylists, set and event designers, exhibition designers, game designers, concept artists, animators and visual merchandisers**.

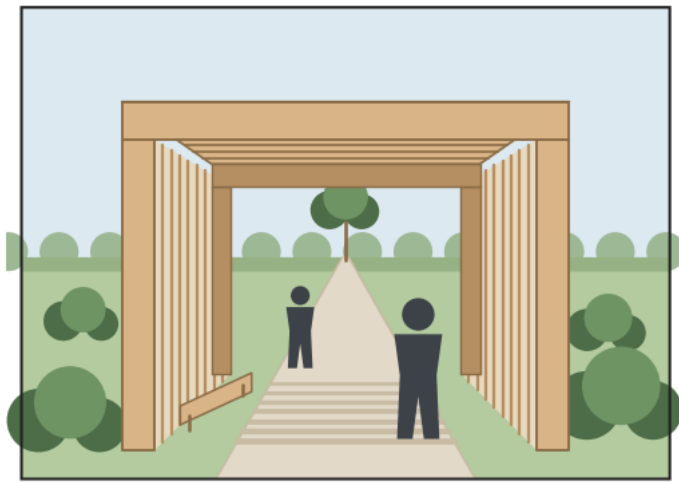
Contexts in which these designers work. Work in this field is unusual in that it is tied to a **place**. For a built environment that place is a real **site**, and the designer moves between the studio and the site itself; for a virtual environment there is no site, and the designer invents a world instead and has to hold it consistent. Either way the designer rarely works alone: a built environment has to be structurally sound, buildable, serviced, compliant and maintained, so the designer sits inside a multidisciplinary team of **specialists** — structural and services engineers, ecologists, surveyors, lighting and materials specialists, heritage and accessibility consultants — together with the builder who constructs the design and the client's own stakeholders. Keep those roles apart: a **specialist** contributes specialist *knowledge* the designer does not have; a **builder** or other tradesperson constructs the resolved design; a client, a user or a councillor is a **stakeholder**.

What designers of environments have to consider. The Study Design names seven considerations particular to this field. Learn the terms — an Environments answer is marked in this vocabulary.

- **Location** — where the site is, and everything that follows from that: climate, aspect, soil, noise, views, neighbours, who passes by and how they arrive.
- **Accessibility** — whether people across a wide range of ages and abilities can enter, move through and use the space *at all*: step-free paths, gradients, handrails, door widths, legible signage, seating at intervals.
- **Usability** — how easily a person can do what they came to do in the space.
- **Configuration** — how the parts of the space are arranged in relation to one another: the plan, the circulation route, what adjoins what, where you can and cannot go.
- **Orientation** — two related meanings, and both are examinable. It is the way the space is **turned on its site** (which way the openings face, where the sun and wind come from), and it is also whether a person can **tell where they are** and find their way.
- **Aesthetic appeal** — the look and feel of the space: its form, proportion, materials, colour, texture and light.
- **Emotive potential** — the capacity of a space to produce a feeling. A low, dim, enclosed room feels protective or oppressive; a tall, top-lit one feels calm or grand. Designers of environments choose these effects deliberately.

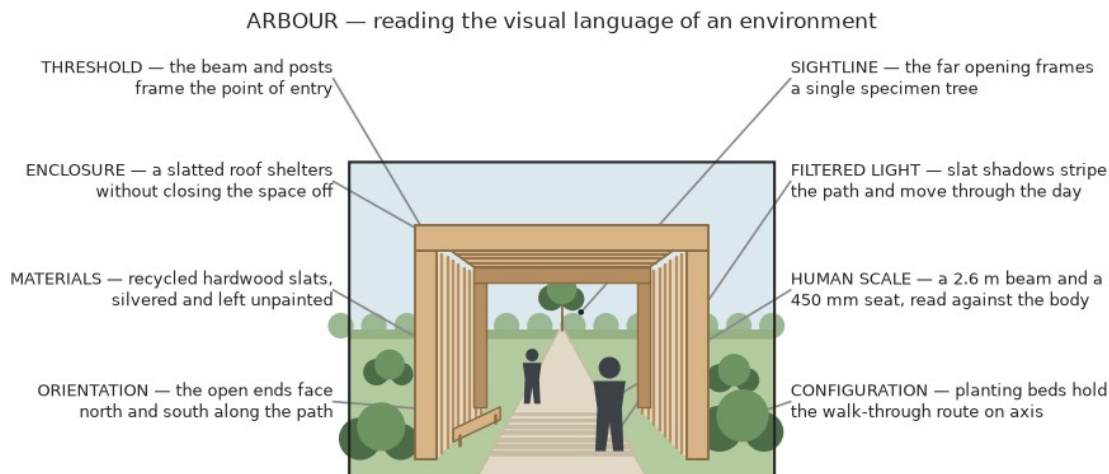
The visual language of the field. A message communicates on a surface and an object communicates in the hand; an environment communicates as **space you move through over time**. That difference shapes the whole vocabulary, and naming it correctly is what separates a field-aware answer from a generic one.

- **Form and volume**, not shape. Shape is a two-dimensional enclosed area; **form** is three-dimensional. In an environment the significant form is often the *void* — the volume of air the walls, roof and floor enclose.
- **Enclosure and openness** — how much the space is closed in. A slatted roof, a low wall or a row of trees can define a space without shutting it off.
- **Threshold** — the point of entry. A gateway, a change of paving, a step or a beam overhead tells a person they have arrived somewhere different.
- **Sightlines and framed views** — what the designer allows you to see, and from where. An opening is a frame; what is placed in it is a decision.
- **Circulation** — the route a person takes. This is the field's version of a visual path: the designer sets an order in which the space is experienced.
- **Human scale** — everything is proportioned against the body: a 2.6 m beam, a 450 mm seat, a 1.8 m person. Drawings in this field include figures for exactly this reason.
- **Light** — natural and artificial. Direction, quantity, colour and *change through the day* are design decisions, not conditions the designer accepts.
- **Materials, texture and colour** — carried at full size and usually touched: sawn timber reads warm and informal, polished stone cool and formal, render soft and quiet.
- **Planting and landscape** — living material that shades, screens, marks a season and softens.
- **Atmosphere** — the sum of the above; the field's own word for a named aesthetic.



ARBOUR — a shade pavilion for a community garden
one-point perspective impression

The original pavilion above, **ARBOUR**, is a typical outcome in this field — a shade structure for the community garden at Wattle Reserve. You cannot pick it up or read it; you walk through it. The annotated breakdown below shows the decisions doing the communicating.



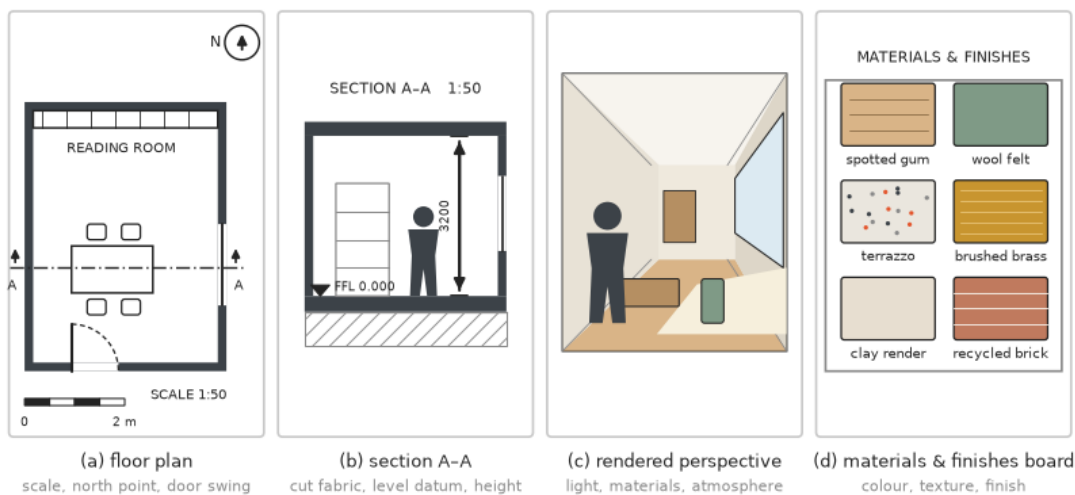
Conventions of the field. A convention is an agreed way of working that designers in a field follow so their work can be understood, checked, approved and built by other people. In Environments the important ones are:

- **Documentation conventions** — the **plan** (a horizontal cut through the space, seen from above), the **elevation** (a flat external face) and the **section** (a vertical cut, showing heights and what is above your head). Site plans and floor plans are the field's staple drawings.
- **Scale conventions** — a stated **ratio** (1:200 for a site, 1:100 or 1:50 for a plan, 1:20 or 1:5 for a detail) *and* a printed **scale bar**, so the drawing can still be measured after it has been photocopied or resized. Dimensions are given in **millimetres**.
- **Poché and hatching** — the material a drawing cuts through is filled in solid or hatched, so a reader can tell instantly what is structure and what is space.
- **Symbols** — the quarter-circle **door swing**, window and glazing lines, stairs with an up arrow, furniture and fittings, planting and tree symbols, contour lines on a site plan.
- **Orientation and level conventions** — a **north point** on every plan, and **level markers** (FFL, RL) that fix heights against a datum.
- **Section markers** — a chain-dash cut line with arrows and a letter (A–A), keying the plan to the section drawn from it.

- **Drawing-method conventions** — **perspective** (one-point and two-point) is the characteristic three-dimensional method of this field, because it shows a space as a person standing in it would see it. **Planometric** drawings are used for interiors when the plan must stay true.
- **Entourage** — figures, planting, vehicles, sky and furniture added to a drawing. It is a convention, not decoration: it gives the viewer **human scale** and shows how the space is used.
- **Rendering conventions** — light, shade, shadow and reflection describe form and identify materials.
- **Schedules and boards** — a **materials and finishes** schedule fixes what everything is actually made of, so a builder and a client are working to the same specification.

Presentation formats characteristic of the field. A presentation format is the *form in which the resolved solution is presented* to a client or other stakeholder. In Environments these include **rendered presentation drawings** (perspective impressions of interiors and exteriors), **floor plans**, **site plans**, **elevations and sections**, **scale models** (physical or digital), **concept boards** and **mood boards**, **materials and finishes boards**, **mock-ups** of a fitting or a finish at full size, **storyboards** and animated walk-throughs, and **virtual or game environments** presented as static views.

TERRACE reading room — presentation formats of the field of Environments



The sheet above shows one original interior, the **TERRACE** reading room — a 4.0 m × 5.4 m room in a converted brick terrace building, fitted out for a small neighbourhood library — in four of the field’s formats. Each answers a different question for a different stakeholder: the **plan** tells the builder where everything goes and which way is north; the **section** tells them how high the room is and what it is cut through; the **rendered perspective** shows the client what it will feel like to sit in; the **materials and finishes board** tells everyone what it will actually be made of.

Virtual environments. A game or film environment is designed with the same spatial visual language — threshold, enclosure, sightline, circulation, light, atmosphere — because it is still a space a person moves through. What changes are the outputs: **concept art** and **storyboards** instead of documentation drawings, a **blockout** of the level instead of a scale model, and a style guide for the world instead of a finishes schedule. The designer is freed from gravity, cost and weather, but takes on new constraints: the camera or the player’s viewpoint, load and draw distance, and the need for the player to be able to read the route without a printed sign.

The analytical move. For a Section A question on an Environments example, work through four steps:

1. **Name the field and the outcome type** — “a shade pavilion in a public garden, an outcome in the field of Environments”.
2. **Name the field-specific visual language used** — enclosure, threshold, sightline, circulation, human scale, light, materials and planting.
3. **Explain how each choice communicates** to the people who use the space — a cause-and-effect chain, with evidence drawn from the example.
4. **Tie the answer back** to the considerations named for the field (location, accessibility, usability, configuration, orientation, aesthetic appeal, emotive potential) and to the purpose and context of the space.

Watch-out — form and space, not shape. **Shape** is a two-dimensional enclosed area; **form** is three-dimensional. Writing “the shape of the pavilion” in an Environments answer signals that you have not registered which field you are in. Better still, talk about the **volume** the design encloses — in this field the space between the elements is the design.

Watch-out — an environment is experienced in sequence. A poster is taken in at a glance; a space is not. Answers that describe only one static view miss the field’s central quality. Track the **circulation**: approach, threshold, arrival, the framed view, the way out.

Watch-out — context is not the presentation format. **Context** is the setting and circumstances in which the environment is created, used or viewed — a windy coastal reserve, a heritage-listed terrace on a busy street, a park used by families after school. The **presentation format** is how the designer showed the solution to a stakeholder — a rendered perspective, a scale model, a finishes board. Naming the format does not answer a question about context.

Watch-out — name the aesthetic, and the feeling. “It supports the aesthetic” earns nothing. Name the specific aesthetic (*natural, calm, industrial, civic, sheltered, austere*) and then, in this field, go one step further and name the **emotive potential** — what the space is designed to make a person feel — showing which element and which principle produce it.

Watch-out — methods, media and materials, in the final environment. The **method** is the manual or digital *process* used to evolve the solution, and it must be named in the Study Design’s own terms — **drawing** (development, documentation or presentation drawing, by hand or digitally), collage, printing, photography, **model-making** and **prototyping**; the **media** are the manual or digital applications used (pencil and marker, or three-dimensional modelling and rendering software); the **materials** are what the environment is made from (timber, brick, steel, glass, render, planting). Evaluate what is visible in the **final** solution, and distinguish **digital** from **manual**. Naming a software package as a “method” loses the mark — and so does naming building work, because “construction”, “assembly” and “welding” are not methods on the Study Design’s list.

Watch-out — legal is not ethical. Copyright in a designer’s plans, drawings and models arises **automatically** on creation — no registration is required. Compliance with the National Construction Code, a local planning scheme and the *Disability Discrimination Act 1992* (Cth) is also **legal**. Consulting Traditional Owners about a site, following the Australian Indigenous Design Charter, acknowledging sources of inspiration and not exaggerating a render are **ethical** obligations. Do not put them in the same list.

Worked examples

Example 1 — scaffolded

Analyse the use and role of visual language in the ARBOUR pavilion in creating a sheltered, calm place for garden users. (4 marks)

Working	Comment
ARBOUR is a shade pavilion in a community garden — an outcome in the field of Environments . It has a <i>calm, sheltered, natural</i> aesthetic.	Open by naming the field, the outcome type and the specific aesthetic. “It looks nice” is not an aesthetic.
Enclosure. The slatted roof and the two side screens define a room without walling it in: the volume is closed overhead and along the sides but open at both ends, so a user is held inside a space while still seeing out into the garden.	Take the field’s own vocabulary in turn. Enclosure is about the volume , not the shape of the timber.
Filtered light. Because the roof is slatted rather than solid, sunlight falls as a striped pattern across the crushed-granite path, and the stripes move through the day. The light is softened rather than blocked, which keeps the space bright and cool at once.	Explain the mechanism — <i>why</i> the choice produces the effect. This is where analysis marks are earned.
Materials and human scale. Unpainted recycled	Tie material and dimension to what a person feels.

Working	Comment
hardwood weathers silver and reads as informal and low-maintenance; the 2.6 m beam sits just above head height and the 450 mm seat matches a seated adult, so the structure feels made for a body rather than for display.	Human scale is the field's proportioning system.
Together these choices give the pavilion its calm, sheltered character and tell garden users, without a sign, that this is a place to stop and rest rather than pass through. That is the role of visual language here — it carries the meaning and shapes behaviour by visual means alone.	Close on the role of visual language for named users. This sentence is what turns description into analysis.

Example 2 — scaffolded

Discuss two conventions applied in the TERRACE floor plan that are characteristic of the field of Environments. (4 marks)

Working	Comment
Convention 1 — a stated scale ratio with a scale bar. The plan is drawn at 1:50 and also carries a printed scale bar graduated from 0 to 2 m.	“Discuss” = identify and explain how it is used, with evidence. Name the convention precisely — not “it has a scale”.
A plan is a working document: the builder setting out the shelving and the joiner pricing the table both measure from it. The ratio lets them convert any measurement on the sheet to a real dimension, and the scale bar keeps that possible even after the drawing has been reduced to A4 or emailed, because the bar shrinks with the drawing while a printed ratio does not.	The explanation must say what would go wrong without the convention. That is the “how it is used” half of the mark.
Convention 2 — the north point. A circled arrow marked N sits in the corner of the sheet, fixing the plan against true north.	Choose a second convention from a different part of the field's practice, not a near-duplicate of the first.
Orientation governs decisions that a plan alone cannot show. Knowing that the window faces east tells the designer that the reading table will get direct morning sun and soft light for the rest of the day, which in turn drives the choice of a matt wool-felt surface that will not throw glare. The north point is therefore the convention that makes every daylight and comfort decision in the room checkable by someone else.	Cause and effect, in the field's own vocabulary (orientation, daylight, glare). Link the convention to a real design decision.

Example 3 — unscaffolded

*Explain how **configuration** and **orientation** influenced the designer's decisions in the ARBOUR pavilion. (4 marks)*

Configuration is how the parts of a space are arranged in relation to one another. ARBOUR is configured as a **walk-through** rather than a room: it straddles the garden's main path, both ends are open, and the planting beds are set hard against the outside of the posts. That arrangement decided the plan — a long rectangle laid along the path rather than across it — and it decided where the seat could go, tucked to one side so that it does not block the route. A visitor is therefore offered a choice the configuration makes obvious: keep walking, or step aside and sit.

Orientation is the way the structure is turned on its site. The open ends face north and south along the path, which puts the long sides east and west, where the low morning and afternoon sun would otherwise cut straight under a roof. That decided the side screens: vertical slats on the long sides block the low sun without stopping the breeze, while the slatted roof handles the high midday sun. Orientation also shaped the sightline — the far opening was aligned on the existing specimen tree, so the walk finishes on a framed view rather than on the back fence (4 marks: both terms)

correctly defined, and each traced to specific decisions the designer made — plan and seat placement for configuration, screens and framed view for orientation).

Example 4 — unscaffolded

Evaluate how effectively the TERRACE presentation sheet communicates the resolved design to its stakeholders, referring to at least two formats. (6 marks)

The sheet is effective because each format is aimed at a different stakeholder and the four together cover what the others leave out. The **floor plan** at 1:50 gives the builder measurable information — the position of the door and its swing, the window opening, the run of shelving, the north point and a scale bar — so the room can be set out on site without a further conversation. The **section A–A** supplies exactly what a plan cannot: the 3200 mm ceiling height, the depth of the cut floor and ceiling, the sill height of the window and a figure standing in the volume, so the client can judge whether a tall room over a small floor area will feel generous or awkward. The **rendered perspective** then answers the question neither drawing answers — what it will *feel* like — showing the light falling from the east window across the timber floor and the atmosphere of the finished room. The **materials and finishes board** fixes the specification so that “timber” means spotted gum and not something cheaper.

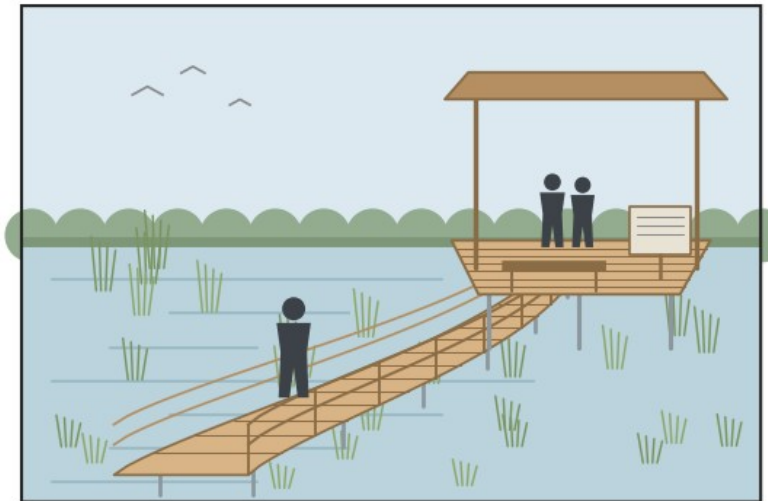
There are limitations. The perspective is the format most likely to persuade and least likely to be accurate: rendered impressions habitually show flattering light, tidy rooms and no services, so a client can approve a feeling that the built room does not deliver. The sheet also carries no scale model or walk-through, so a stakeholder cannot test the approach into the room or how it reads from the street, and the finishes board shows small samples that will look different across a whole floor.

Overall, because the technical formats and the experiential formats are presented together and each is drawn to the field’s conventions, the sheet communicates the resolved design effectively to builder and client alike, with the caveat that the perspective should be read alongside the dimensioned drawings rather than instead of them *(6 marks: at least two formats analysed for specific stakeholders; evidence from the sheet; a limitation; an overall judgement)*.

Practice questions

Scaffolded

- Q1.** Using the ARBOUR pavilion: (a) Identify the field of design practice to which it belongs. *(1 mark)* (b) Name the type of design outcome it is, using a category listed for that field. *(1 mark)* (c) State the purpose of the pavilion and name the users it serves. *(2 marks)*
- Q2.** Using the annotated breakdown of the ARBOUR pavilion: (a) Identify the **threshold** and state what it marks for a visitor. *(2 marks)* (b) Describe the sequence in which a visitor experiences the pavilion, from the approach along the path to the framed view. *(3 marks)*
- Q3.** Using the TERRACE presentation sheet: (a) Name the four presentation formats shown. *(2 marks)* (b) Identify two conventions visible in the **section** drawing. *(2 marks)* (c) Explain what the section tells the client that the floor plan cannot. *(2 marks)*
- Q4.** (a) List four of the considerations the Study Design names for designers of environments. *(2 marks)* (b) For **two** of the considerations you listed, name one decision in the TERRACE reading room that responds to it. *(2 marks)*
- Q5.** (a) State what is meant by the **emotive potential** of an environment. *(1 mark)* (b) With reference to ARBOUR, explain how two design decisions shape a visitor’s emotional response. *(3 marks)*
- Q6.** Distinguish between the **context** of the TERRACE reading room and the **presentation formats** used to present it to the client. *(3 marks)*



BOARDWALK — a wetland viewing walk and lookout, Salt Creek Reserve
rendered presentation drawing

Questions 7–17 refer to the BOARDWALK wetland viewing walk shown above, unless otherwise stated. It is an elevated hardwood boardwalk on galvanised steel screw piles, leading to a shaded lookout platform with a bench and an interpretive panel, in a coastal saltmarsh reserve.

Q7. Identify the field of design practice to which BOARDWALK belongs, and describe two features of the design that are typical of that field. (3 marks)

Q8. Analyse how **one design element** and **one design principle** have been used to support the aesthetic decisions in BOARDWALK. Name the aesthetic. (4 marks)

Q9. Explain how the **location** of the site has influenced three of the designer's decisions. (3 marks)

Q10. Evaluate the **accessibility** and **usability** of BOARDWALK for a range of visitors. (4 marks)

Q11. Discuss how **human scale** is communicated in the drawing, and explain why **entourage** is a convention of this field. (3 marks)

Q12. Explain the role of one **specialist** the designer of BOARDWALK would work with, and how that specialist's knowledge would shape the design. (3 marks)

Q13. Explain one **legal** and one **ethical** obligation the designer of BOARDWALK must meet. (4 marks)

Q14. Explain how **one** technological, economic, cultural, environmental or social factor may have influenced the designer's decisions for BOARDWALK. (4 marks)

Q15. Evaluate the application of **methods, media and materials** in the final BOARDWALK. (4 marks)

Q16. Describe **two** presentation formats, other than the rendered perspective shown, that the designer could use to present BOARDWALK to the shire council, and justify each. (4 marks)

Q17. Compare ARBOUR and BOARDWALK as design outcomes in the field of Environments, referring to their purposes, their visual language and one consideration named for the field. (6 marks)

Q18. The field of Environments includes **virtual spaces**. Explain how the visual language and presentation formats used by a game or film environment designer are similar to, and different from, those used by an architect. (4 marks)

Q19. Choose **one** of the three environments in this subtopic. Evaluate how effectively it reflects conceptions of **good design**, referring to a named conception and to the purpose and context of the environment. (6 marks)

Answers

Q1. (a) Environments. (b) A park/garden structure — parks, streetscapes and gardens (accept an outdoor public environment). (c) To provide shade and rest on the garden's main path, for community-garden users and park visitors.

Q2. (a) The near beam and posts you walk under/between; it marks entry into a different, sheltered space. (b) Approach along the path → pass under the beam → the enclosed, striped-shade interior with the seat → the far opening framing the specimen tree.

Q3. (a) Floor plan; section A–A; rendered perspective; materials and finishes board. (b) Any two of: poché/solid fill on the cut walls, floor and ceiling; hatching for the ground below; the 3200 mm ceiling-height dimension; the FFL 0.000 level datum; the figure for scale; the 1:50 ratio. (c) See solutions.

Q4. (a) Any four of: location, accessibility, usability, configuration, orientation, aesthetic appeal, emotive potential. (b) See solutions.

Q5. (a) The capacity of a space to produce a feeling in the people who use it. (b) See solutions.

Q6. Context = a converted brick terrace on a neighbourhood street, used quietly by library visitors; presentation formats = the plan, section, rendered perspective and finishes board used to show the client the solution.

Q7–Q19. See fully-worked solutions.

Fully-worked solutions

Q1. (a) **Environments.** (b) It is a structure in a **park/garden** — the Study Design's category of “parks, streetscapes and gardens” (accept: an outdoor public environment). (c) Its purpose is to provide **shade, shelter and a place to rest** on the community garden's main path, and to mark that path as a route worth walking. Its users are the **community gardeners and park visitors** who use the reserve — including older visitors and families, for whom a shaded seat at a mid-point of the walk is what makes the garden usable in summer (2 marks: a purpose stated in terms of what the space does for people, plus a specific user group).

Q2. (a) The **threshold** is the near beam and the two posts, which a visitor passes under and between on the way in. It marks the **point of entry** — the moment the visitor leaves the open, sunlit path and enters a defined, sheltered space. (b) The sequence is: the visitor **approaches** along the crushed-granite path, with the pavilion framing the view ahead; they **pass under the threshold** beam, which is set just above head height so the change is felt as well as seen; inside, they are in an **enclosed volume** with slat shadows striping the path, the side screens closing the long sides and a low seat offered to one side; finally the **far opening frames the specimen tree**, so the walk resolves on a view rather than on a fence. The designer has set an order in which the space is experienced — the field's version of a visual path (3 marks: approach, threshold, interior and framed view, described as a sequence rather than a list of parts).

Q3. (a) A **floor plan**; a **section (A–A)**; a **rendered perspective** (presentation drawing); a **materials and finishes board**. (b) Any two of: **poché** — the cut walls, floor slab and ceiling slab filled solid; **hatching** to indicate the ground below the floor; the **3200** ceiling-height dimension with its dimension line and ticks; the **FFL 0.000** level datum; the **figure** included for human scale; the stated **1:50** ratio. (c) A plan is a horizontal cut: it fixes where things are but says nothing about how high they are. The section is a vertical cut, so it tells the client the things they will actually feel in the room — that the ceiling is **3200 mm** above the floor, that the window sill sits above desk height, and, because a 1.8 m figure is drawn in the volume, what the proportion of that height to the floor area will look like. It also shows the construction the plan hides: the thickness of the floor and ceiling and the ground beneath (2 marks: the plan/section distinction made in terms of what each drawing cuts, plus at least one specific piece of information only the section carries).

Q4. (a) Any four of: **location, accessibility, usability, configuration, orientation, aesthetic appeal, emotive potential**. (b) For example — **Configuration**: the door is placed in the short wall and the reading table sits centrally, so the circulation route runs around the table rather than through it, and the shelving wall can be browsed without disturbing anyone seated. **Orientation**: the north point shows the window facing east, so the reading table is placed to catch morning light while the matt wool-felt surface avoids glare later in the day. (Accept **accessibility** — a single wide door leaf with a clear swing and no step at the threshold; **aesthetic appeal** — the spotted gum, clay render and recycled brick palette; **usability** — the full-height shelving within reach of the table) (2 marks: one specific, evidenced decision for each of two named considerations).

Q5. (a) **Emotive potential** is the capacity of a space to produce a feeling in the people who use it — the fact that a designer can make a space feel calm, protective, grand or exposed. (b) Two decisions in ARBOUR: first, the **planting beds and side screens held tight against the posts** shut off the long sides at eye level, so a person inside is screened from the rest of the park; being partly concealed rather than on display produces a feeling of **seclusion and privacy** in what is actually a public garden. Second, the **low seat is set to one side and turned outward**, facing the path and the

planting rather than a wall, and the walk finishes on the **framed view of the specimen tree**; a person who sits is therefore given something to look at and no reason to hurry, which produces a **settled, unhurried** feeling rather than the perched, waiting-room feeling of a seat facing nothing (3 marks: two decisions, each linked by a mechanism to a named feeling).

Q6. The **context** of the TERRACE reading room is the setting and circumstances in which it is created, used and viewed: a room in a **converted brick terrace building** on a neighbourhood street, retro-fitted as a small library reading room, used quietly by a handful of readers at a time, and lit from the east. Context also includes the constraints that come with the site — an existing masonry shell, a fixed 3200 mm floor-to-ceiling height and a heritage fabric that limits what can be cut into. The **presentation formats** are the forms in which the designer shows the resolved solution to the client: the floor plan, the section, the rendered perspective and the materials and finishes board. The two are often confused, but naming a format (“it is a plan”) does not describe a context, which must say where, when, by whom and under what circumstances the space is created, used or viewed (3 marks: each term defined + applied to this example + the distinction made explicit).

Q7. BOARDWALK belongs to the field of **Environments** — it is an outdoor public space, a walk and lookout within a reserve, which falls under the Study Design’s category of “parks, streetscapes and gardens”. Two typical features are: (i) it is a **space a person moves through over time** rather than an image or an object — the design sets a route, a threshold at the start of the deck, a change of level and a destination at the platform; and (ii) it is drawn using the **conventions of the field** — a rendered perspective with **entourage** (figures, reeds, birds) that gives the viewer human scale and shows the space in use (3 marks: field named + two features described as field-typical, not merely listed).

Q8. BOARDWALK has a *quiet, natural, recessive* aesthetic — it is designed to sit inside the landscape rather than to be looked at. The designer has used the **element of line** with the **principle of repetition (pattern)**. The deck boards, the two horizontal handrails and the regular vertical rail posts set up a steady repeated line that runs the whole length of the walk, and the curve of the route means those lines bend with the shoreline rather than cutting across it. Because the repeated lines are thin, horizontal and evenly spaced, the structure reads as a light frame laid over the water instead of a solid mass, and the eye passes through it to the reeds and the water beyond. Combined with the unpainted hardwood, which weathers to the same greys and browns as the saltmarsh, the repeated line builds the recessive, natural aesthetic and tells visitors that the reserve, not the structure, is the thing they have come to see (4 marks: aesthetic named; one element and one principle named; the mechanism explained; the choice tied back to the aesthetic and the users). Accept **texture** with **contrast** (sawn timber against water and reeds), or **colour** with **figure–ground**, argued to the same standard.

Q9. The **location** is a low, open, coastal saltmarsh, and it has shaped the design throughout. First, it decided **where the walk ends and which way that end faces**: the lookout is placed where the marsh opens out and is turned outward across the water, so the destination delivers the view that is the reason for coming, rather than facing back toward the car park. Second, it decided the **shelter and safety elements**: an open coastal site has no existing tree cover and is windy and exposed, so the designer has had to build shade in — the canopy over the lookout — and to run handrails the full length of the deck, neither of which the site itself provides. Third, it decided the **fixings and finish**: salt-laden air and standing water corrode ordinary steel quickly, so the piles and fixings are **galvanised** and the decking is a dense, durable hardwood chosen to survive constant wetting (3 marks: three distinct decisions, each traced to a specific feature of the site).

Q10. The accessibility and usability of BOARDWALK are good, with limits. As a **strength**, the route is a continuous ramped deck with no steps and a handrail on both sides for its full length, so a visitor using a wheelchair, a walking frame or a pram can complete the walk under their own power — the single most important accessibility decision in a reserve of this kind. **Usability** is supported by the bench and the shade canopy at the lookout, which let a visitor rest at the destination rather than having to turn straight back, and by the interpretive panel, which tells people what they are looking at. As **limitations**, the deck narrows markedly toward the lookout, and no passing or turning bay is shown, so two visitors using mobility devices could not pass one another; the interpretive panel is mounted upright at standing height, which is difficult to read from a seated position; and there is no shade at all along the walk itself, which matters in an exposed coastal site. **Overall**, the design is accessible in the way that counts most — a step-free, railed, continuous route to a shaded destination — but a review of deck width, passing places and the panel’s mounting height would be needed before it could be called accessible to all visitors (4 marks: accessibility and usability both addressed; specific evidence; strengths and limitations; an overall judgement).

Q11. Human scale is communicated in the drawing by the **figures**: one visitor part-way along the walk and two at the lookout. Because a viewer knows roughly how tall a person is, the figures let them read every other dimension off the drawing — that the handrail sits at about waist height, that the canopy clears the visitors' heads comfortably, and that the deck is wide enough for two people but not for a crowd. Without them the same drawing could be a model of a garden feature or a full-sized pier. **Entourage** — the figures, the reeds, the birds and the sky — is a convention of this field precisely for this reason: an environment has no fixed size on the page, so the drawing must supply a familiar object to measure it against, and the entourage simultaneously shows the space **in use**, which is what the client is actually buying (3 marks: *how scale is communicated in this drawing + what entourage is + why the field needs the convention*).

Q12. The designer would work with an **ecologist** (an environmental scientist specialising in coastal wetlands). Their **specialist knowledge** is of the saltmarsh itself: which zones are the most sensitive, where migratory shorebirds feed and roost, tidal ranges, and the seasons in which construction would do least damage. That knowledge shapes the design directly — it determines the **alignment** of the route (keeping the deck to the firmer edge and off the feeding flats), the **height** of the deck above the marsh so light and tidal water still reach the plants beneath, the **position and orientation** of the lookout so people watch birds from a distance that does not flush them, and the **content** of the interpretive panel. This is a genuine specialist relationship: the ecologist contributes knowledge the designer does not have, rather than a preference or an opinion (3 marks: *a specialist correctly identified as a knowledge-holder, plus at least two design decisions their knowledge shapes*). Accept a **structural engineer** (pile and span design in a corrosive tidal environment), a **coastal or hydrological engineer**, a **surveyor**, an **accessibility consultant** or a **cultural-heritage adviser** argued to the same standard. A client, a visitor or a councillor is a **stakeholder**, not a specialist — and a **builder** or other tradesperson is not a specialist either, because their role is to construct the resolved design rather than to contribute the specialist knowledge that resolves it.

Q13. A **legal** obligation is compliance with the law governing what may be built and who must be able to use it. The designer must meet the **National Construction Code** and the local **planning scheme** for a structure in a coastal reserve, and must provide an accessible path of travel consistent with the **Disability Discrimination Act 1992 (Cth)**. A second legal obligation concerns **copyright**: copyright in plans, drawings and models arises **automatically** on creation and belongs to their author, so the designer may not copy another practice's documentation, and must obtain a licence before reproducing a supplied survey, photograph or illustration on the interpretive panel.

An **ethical** obligation is to engage respectfully with the **Traditional Owners** of the site. The reserve is on Country, and if the interpretive panel is to refer to Aboriginal knowledge, language, seasons or designs, the designer should seek free, prior and informed consent, follow the protocols in the **Australian Indigenous Design Charter**, and ensure the knowledge is attributed to and shared with its custodians. This is an **ethical** framework, not a legal one — the distinction matters, and confusing the two is a common error. Other ethical obligations include acknowledging sources of inspiration and presenting the rendered perspective honestly, rather than showing more planting, less crowding or better weather than the finished walk will have (4 marks: *one legal and one ethical obligation, correctly classified, kept distinct and applied to this design*).

Q14. (Model answer using the environmental factor.) The **environmental** factor has shaped the designer's decisions throughout, because the design has to sit on a living ecosystem without damaging it. It decided the **structure**: the walk is **elevated on screw piles** rather than laid as a compacted path, because screw piles are wound into the ground rather than dug and poured, so they disturb almost none of the marsh, and they can be unwound and taken out again at the end of the structure's life — a circular decision rather than a make-use-dispose one. It decided the **alignment**: the deck curves along the firmer margin to keep construction traffic and visitors off the open feeding flats, and it is held high enough that tidal water, light and small animals still pass underneath. It decided the **finish**: the hardwood is responsibly sourced and left **unsealed**, so the deck weathers instead of needing repeated coatings that would shed into the water, and individual boards can be replaced without dismantling the walk. The factor has therefore acted on the **designer's decisions** about structure, alignment and finish, not merely on the subject matter of the project (4 marks: *the exact factor term used; specific decisions named; the influence traced to the designer's choices*).

Accept a **cultural** answer argued to the same standard: consultation with the Traditional Owners of the reserve leads the designer to align the route away from a culturally significant area, to choose a muted, unpainted palette that keeps the structure subordinate to Country, and to give the interpretive panel over to seasonal knowledge authored and attributed to its custodians. Accept **economic** (a small shire budget drives a single repeated deck module and a

standard pile) or **social** (an ageing local population drives the step-free gradient, the continuous handrail and the seat at the lookout).

Q15. The **method** used to deliver the final BOARDWALK is **digital drawing**: the resolved solution is presented as a rendered **presentation drawing** — a perspective impression of the finished walk, built and rendered on screen rather than drawn by hand. The **media** are digital **three-dimensional modelling and rendering applications**, not pencil, marker or ink. The **materials** are **hardwood** decking, rails and posts, **galvanised steel** screw piles and fixings, and a printed composite panel for the interpretive sign.

The application is largely effective. **Digital drawing** is well matched to the job: rendering on screen shows a shire council the weathered timber, the reeds and the low coastal light of a structure that does not yet exist, and the viewpoint is set at about a visitor's eye level, so the council judges the walk as a visitor will meet it. Hardwood is well matched to the final environment: it is durable in wet, salt-laden air, it can be cut and replaced board by board when a section fails, and left unsealed it weathers to the greys of the marsh, so the material choice delivers the recessive aesthetic and the maintenance strategy at once. Galvanising is the correct response to a corrosive tidal site, where untreated steel would fail at the waterline first, and the rendering distinguishes the grey steel piles from the hardwood above them, so the material specification can be read off the drawing rather than taken on trust.

The **limitations** are that unsealed hardwood becomes slippery when wet and is exposed here to salt spray and morning damp, so the deck surface will need a non-slip insert or grooving that the final design does not show; that a timber deck in a marine environment carries a higher ongoing maintenance burden than a composite would; and that a rendered perspective is the only format delivered, so it shows the walk in flattering light and still water and carries no dimension a councillor could check. **Overall**, because the materials suit the corrosive, sensitive site and the digital drawing renders them convincingly at a visitor's eye level, the methods, media and materials are applied effectively in the final solution (4 marks: MMM correctly separated and named in the Study Design's own terms, and digital distinguished from manual; judged in the final solution rather than in the process; a strength and a limitation; an overall judgement).

Q16. Format 1 — a scale model. A physical model of the reserve at, say, 1:200, showing the shoreline, the curve of the deck and the lookout, would let councillors walk around the proposal and see it from every side. This suits the field because an environment is three-dimensional and is approached from many directions; a model answers “what will this look like from the car park and from the water?” in a way a single fixed viewpoint cannot, and it is quickly understood by people with no training in reading drawings.

Format 2 — a site plan. A site plan at 1:500 with a north point, contours and the reserve boundary would show the council what a perspective cannot: exactly where the structure sits on public land, how far it is from the sensitive flats, how it connects to the existing car park and path network, and how much of the marsh it touches. This suits the field because a council approves a **location** and an impact, not a picture, and the plan is the document that can be measured and checked against the planning scheme (4 marks: two formats described and each justified against the stakeholder's actual need — not simply named). Accept a **concept board**, a **materials and finishes board**, an animated **walk-through** or a full-size **mock-up** of the deck and rail, justified to the same standard.

Q17. Both ARBOUR and BOARDWALK are outcomes in the field of **Environments**: both are outdoor public spaces a person moves through, both are made from unpainted timber, and both use the same spatial visual language — a threshold at the entry, a set route, a destination and a framed view — and both are presented as rendered perspectives with entourage. Their **purposes** differ. ARBOUR exists to provide **shelter and rest** at a point on a path: it is a place to stop, and its whole design is about staying. BOARDWALK exists to give **access to a landscape that could not otherwise be entered**: it is a route, and its design is about moving safely and lightly across a place. That difference drives the **visual language**. ARBOUR works through **enclosure** — a roof at 2.6 m, screens on both long sides, filtered light and a seat — so the volume closes around the user. BOARDWALK works through **openness and line** — a thin repeated horizontal structure, rails at waist height, nothing overhead until the lookout — so the visitor stays exposed to the marsh, which is the point of coming. Their **configuration** shows the same contrast. ARBOUR is configured as a **walk-through with a choice**: both ends are open, the route runs straight past, and the seat is set aside so that stopping is offered but never forced. BOARDWALK is configured as a **single linear route with one destination**: there is no branch, no alternative and no way to leave the deck, and the only place to stop is the lookout at the end — an arrangement chosen because keeping every visitor on one narrow route is what protects the marsh either side of it. Both designs answer their site and purpose well; the difference is that one is configured to hold you still and the other

to carry you through (6 marks: congruent two-sided treatment; similarities and differences; purpose, visual language and one named consideration addressed for both examples).

Q18. The **similarities** come from the fact that a virtual space is still a space a person moves through. A game or film environment designer uses the same spatial visual language as an architect — **threshold, enclosure, sightlines and framed views, circulation, human scale, light and atmosphere** — and for the same reason: to tell a person where they are, where they may go and how they should feel. A doorway lit from beyond draws a player forward in a game exactly as it draws a visitor forward in a building.

The **differences** are in the constraints and the outputs. The virtual designer is not bound by gravity, cost, weather, structure or building regulation, but is bound by the **camera or player viewpoint**, by what the engine can render, and by the need for the route to be readable without signage. The presentation formats differ accordingly: **concept art, storyboards**, a greybox or **blockout** of the level and a **style guide** for the world, rather than dimensioned plans, elevations, sections, a materials and finishes schedule and a physical scale model. An architect's documentation must be measurable enough to build from; a game environment's documentation must be consistent enough for a team to model from (4 marks: a congruent two-sided treatment; visual language and presentation formats each addressed on both sides).

Q19. (Model, using BOARDWALK and Dieter Rams' Ten Principles for Good Design.) BOARDWALK reflects conceptions of good design well. Its **purpose** is to give the public access to a coastal saltmarsh without damaging it, and its **context** is a sensitive, tidal, exposed reserve reached on foot and used by local walkers, birdwatchers and school groups. Judged against **Dieter Rams' Ten Principles**, the design performs strongly. Rams' principle that good design **makes a product useful** is met head-on: a step-free, continuously railed ramp to a shaded seat makes the reserve usable by visitors who could not cross the marsh on foot, which is the whole reason for building anything here. Good design is **environmentally friendly**: the screw piles are wound into the ground rather than dug and poured, so they disturb very little of the site and can be unwound and removed, and the elevated deck leaves tidal water, light and wildlife free beneath it. Good design is **long-lasting**: dense hardwood and galvanised fixings suit a corrosive tidal site, and the deck is repairable board by board rather than replaced whole. And good design is **as little design as possible** — the thin repeated horizontal lines and the unpainted weathering timber keep the structure subordinate to the marsh that visitors came to see.

There are **limitations**, and they gather under Rams' principle that good design is **thorough down to the last detail**. The deck narrows toward the lookout with no passing bay, so the walk is not in fact useful to two visitors using mobility devices at once; the upright interpretive panel is hard to read seated; and an unsealed timber deck in a salt-spray environment raises a slip-resistance and maintenance question the design has not yet resolved. These are matters of resolution rather than of concept.

Overall, because the design serves a clearly defined public purpose, responds precisely to a demanding context and accepts the responsibility to leave the site better than it found it, BOARDWALK reflects conceptions of good design effectively, subject to the detailing of width, panel height and deck surface (6 marks: a named conception applied; purpose and context stated explicitly; evidenced strengths; limitations; an overall judgement). Accept a similarly evidenced evaluation of ARBOUR or the TERRACE reading room, and any other named conception used as criteria and argued from evidence — Good Design Australia's award criteria, the *Good Design* series published by the Victorian Government Architect, or a defensible personal or culturally specific conception the student states first and then applies.

Chapter 6 Fields of design practice — 6D Interactive experiences

Theory

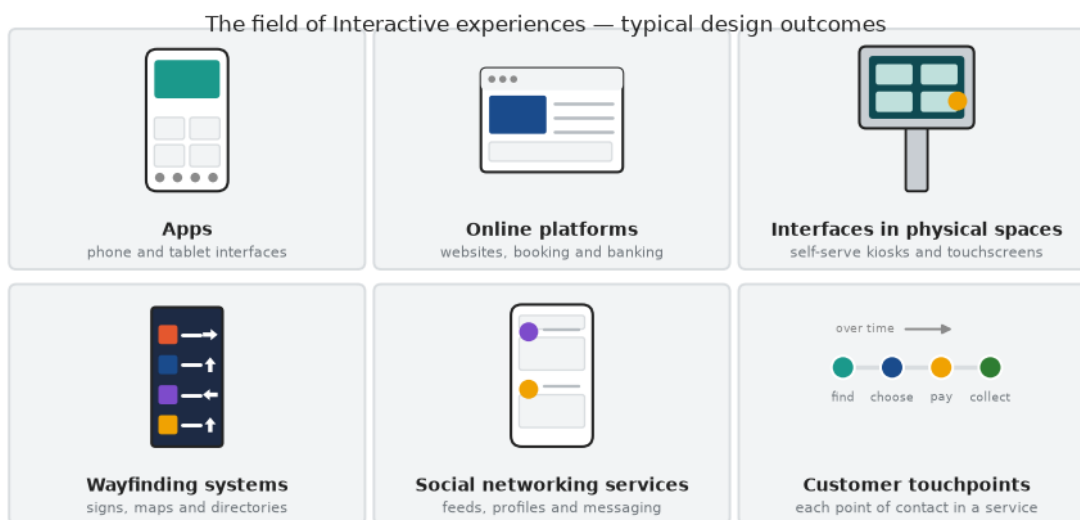
The Study Design divides design practice into four **fields**: Messages, Objects, Environments and **Interactive experiences**. Almost every Section A question begins by asking you to tick one of these fields — or one named design example from the Resource Book — and answer with reference to it; the exception is the contemporary-designers question, which you answer from designers you studied during the year. So you must be able to recognise an Interactive experiences example on sight, name the field's typical **design outcomes**, and describe the **visual language**, **conventions** and **presentation formats** that belong to it.

What the field is. In this field, designers “contribute to the shape of interactive experiences both in the physical world and online, ensuring the **objectives of users** are met when engaging with a product, system or service”. Two things separate the field from the other three. First, the outcome is not simply looked at, walked through or picked up — it is **used**. The person in front of it has something they are trying to do, and the design either helps them do it or gets in the way. Second, the outcome is a **sequence that unfolds over time**: it changes as the user acts on it, so the design is a set of screens, states and transitions rather than one fixed image.

The Study Design also states the field's purpose in one sentence worth memorising: “Visual language plays a crucial role in facilitating interactive experiences that are **efficient, intuitive, satisfying and accessible**.” Those four words are the criteria an outcome in this field is judged against, and they belong in your answers.

Users, not just an audience. In Messages you write about an *audience* who receives a communication. Here you write about **users** who have an **objective** — to catch the next bus, to find the imaging department, to know whether it is safe to swim. Naming the objective is usually the first mark in an Interactive experiences answer.

Typical design outcomes. The Study Design names the **aesthetic qualities and usability** of **customer touchpoints**, **wayfinding systems** and **interfaces** encountered “in physical spaces or on digital devices including **apps**, **online platforms** and **social networking services**”.



Who works in the field. Interaction designers, user-experience (UX) designers, user-interface (UI) designers, interface and web designers, and service designers. The Study Design is explicit that “**interaction designers contribute to larger user-experience (UX) design teams who oversee all components and phases of the customer journey**” — so a designer in this field is almost never the sole author of the experience.

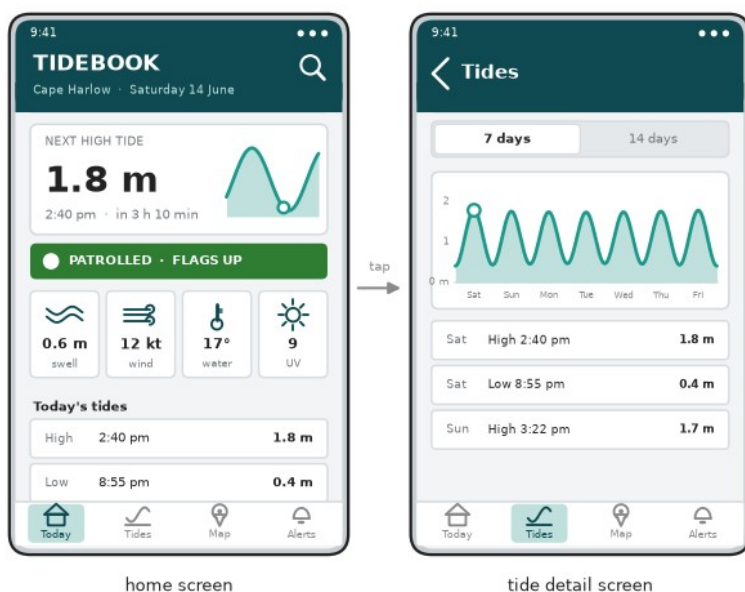
Contexts in which these designers work. Work in this field moves between a studio and the user: research with real users, then design, then testing, then revision. The team is multidisciplinary — UX researchers, content designers, accessibility specialists, front-end developers and engineers, and, for a physical touchpoint, fabricators and installers. Because other people build what the designer draws, the work is handed over as a specified, documented set of components rather than as a picture.

What VCE requires. The Study Design sets a firm boundary: “students develop visual interfaces presented as **static design solutions** and are **not required to produce functional prototypes**”. You design, present and analyse **static visual representations of content and intended interactions** — screens, wireframes, flows and annotations. You are never marked on code.

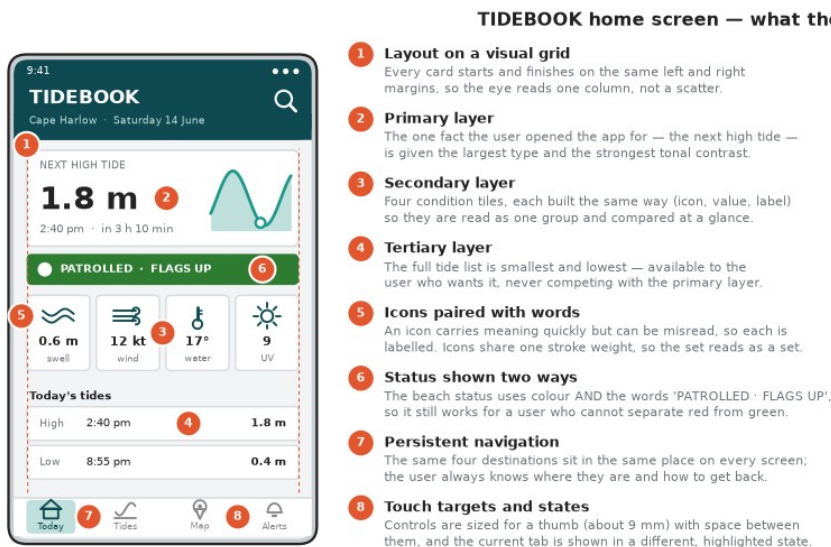
The visual language of the field. The Study Design lists the components as “the **display, layout and relationship of icons, symbols, images and type**, as well as additional elements such as **sound and animation**”. In practice this vocabulary is what an analysis is written in.

- **Icons, symbols and pictorial representations.** An **icon** resembles what it stands for (a wave for swell); a **symbol** stands for something by convention and must be learned (a magnifier for “search”). Both are read faster than words, and both can be misread — which is why they are usually labelled.
- **Type and typographic conventions.** Screen type must survive glare, distance and small sizes: a defined type scale, restrained weights, sentence case for long strings, and line lengths short enough to scan.
- **Layout on a visual grid.** Columns, gutters, consistent margins and a repeating spacing step give the eye one predictable path down the screen instead of a scatter of unrelated blocks.
- **Hierarchy and the visual path.** The interface ranks information as primary, secondary and tertiary and leads the user through it. The primary layer should be the answer to the objective the user opened the interface for.
- **Colour.** Colour codes zones and states (green for safe, red for urgent) and separates figure from ground. Because some users cannot separate one hue from another, colour is paired with words, shapes or icons rather than carrying the meaning alone.
- **Affordance and signifiers.** A control has to *look* pressable. Fill, elevation, shape and position tell a user what can be acted on and what is only information.
- **States and feedback.** Every control has states — default, selected, disabled, error, loading — and the interface must answer the user’s question “did that work?” immediately after each action.
- **Navigation and consistency.** A persistent bar or menu, a back control, a breadcrumb or a “you are here” marker tell a user where they are, where they can go and how to return.
- **Touch targets and reach.** The body is part of this field too: controls sized for a fingertip, spaced so the wrong one is not hit, and — on a physical touchpoint — mounted within reach.
- **Sound and animation.** A transition that slides a new screen in from the right tells the user they have gone forward; a sound or a vibration confirms a payment without being looked at.
- **The journey.** The field’s version of a visual path is the **sequence of screens and states** a user moves through to complete a task.

TIDEBOOK — tide and beach conditions app, Cape Harlow



The original app above, **TIDEBOOK**, is a typical outcome in this field — a tide and beach-conditions app for the coastal town of Cape Harlow. You do not read it like a poster; you open it with a question. The annotated breakdown below shows the decisions doing the communicating.

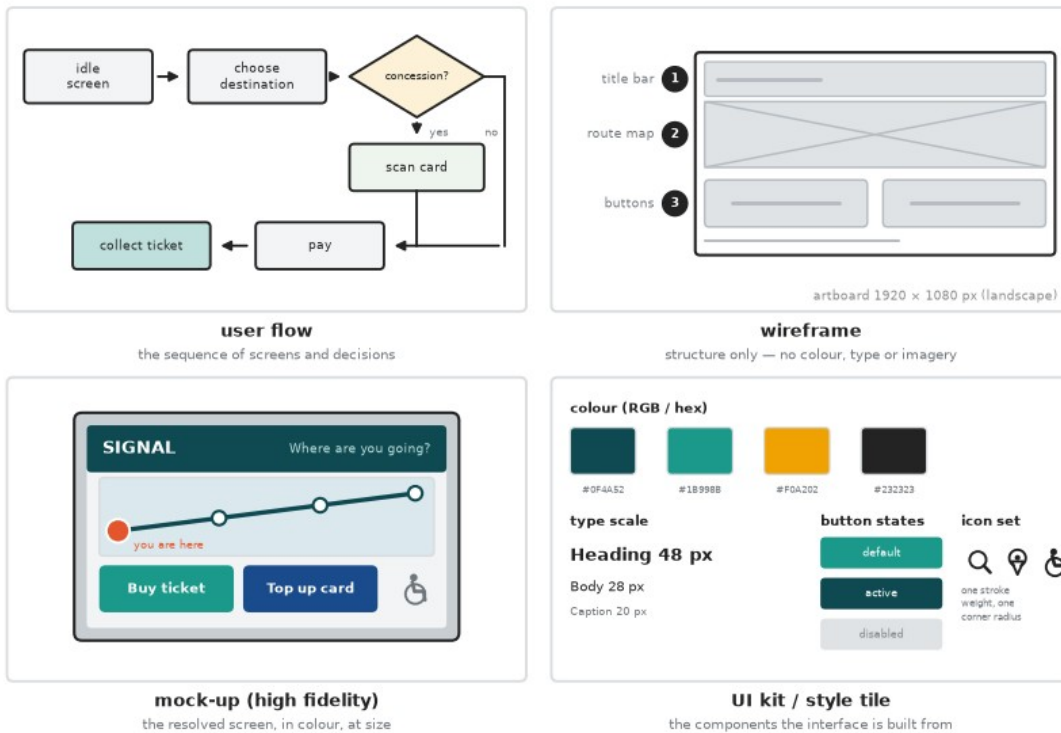


Conventions of the field. A convention is an agreed way of working that designers in a field follow so their work can be understood, tested, approved and built by other people. In Interactive experiences the important ones are:

- **Wireframe conventions** — grey boxes for content blocks, a crossed rectangle for an image, ruled lines for text, no colour, no typeface and no imagery, so the reader judges **structure** and nothing else.
- **Sitemap and user-flow notation** — a rectangle for a screen, a diamond for a decision, an arrow for a transition, so the whole task can be checked before a single screen is styled.
- **Screen-size and artboard conventions** — the device and the artboard dimensions are stated (1080 × 1920 px for a portrait phone screen, 1920 × 1080 px for a landscape kiosk display), along with safe areas, orientation and the breakpoints at which a responsive layout rearranges. The artboard fixes the design in **pixels**, not in millimetres: the physical size of the panel is specified separately.
- **Grid and spacing conventions** — a stated column grid, consistent margins and a repeating spacing step, so that every screen in the set aligns to the same structure.
- **Colour conventions** — screen colour is specified in **RGB** (usually as a hex value) because screens emit light, where print is specified in CMYK. Naming the exact value is what makes the colour reproducible by someone else.
- **Iconography conventions** — one stroke weight, one corner radius and one optical size across the whole set, and learned symbols used with their conventional meanings.
- **Accessibility conventions** — a minimum contrast between text and its background, a minimum touch target of roughly 9 mm, type that can be enlarged, never relying on colour alone, and text alternatives or captions for anything not carried by words. For a touchpoint in a physical space, Australian Standards for accessible design set mounting heights and require tactile and braille signage.
- **Annotation conventions** — because the solution is presented statically, the intended interactions are written on the drawing: what happens on tap, what the next screen is, what the error state says.
- **Component and design-system conventions** — a UI kit that names and specifies every component and each of its states, so a developer builds the same button the designer drew.

Presentation formats characteristic of the field. A presentation format is the *form in which the resolved solution is presented* to a client or other stakeholder. In Interactive experiences these include **wireframes**, **user-flow diagrams** and **sitemaps**, **mock-ups** (high-fidelity static screens), **screen sequences** and **storyboards** of a journey, **device mock-ups** (a screen shown in its phone, tablet or kiosk), **style tiles** and **UI kits**, **journey maps**, **concept boards**, and **annotated static screens** standing in for a click-through.

SIGNAL — self-serve ticketing kiosk, Harlow Coast bus network



The sheet above shows one original interface, **SIGNAL** — the self-serve ticketing kiosk for the Harlow Coast bus network — in four of the field’s formats. Each answers a different question for a different stakeholder: the **user flow** tells the client and the developer what the whole task looks like and where it can branch; the **wireframe** settles structure and priority before anyone argues about colour; the **mock-up** shows the operator exactly what a passenger will see; and the **UI kit** gives the development team the components, the hex values, the type scale and every button state, so the built product matches the drawing.

Interfaces in the physical world. A wayfinding system or a kiosk uses the same visual language as an app, but under different conditions. It is read at distance and at speed, in lighting the designer does not control, by people who cannot zoom in and who often arrive stressed or unwell. It is fixed in one place, so the “journey” is a route through a building and the design must answer the user’s question again at every decision point. Its material is a sign face or a touchscreen rather than a personal device, so mounting height, glare, durability and cleaning all become design decisions, and tactile, braille and audio alternatives carry the information to users who cannot read the screen.

The analytical move. For a Section A question on an Interactive experiences example, work through four steps:

1. **Name the field, the outcome type and the user’s objective** — “a self-serve ticketing kiosk, an outcome in the field of Interactive experiences, used by a passenger who wants a ticket before the bus arrives”.
2. **Name the field-specific visual language used** — icons and symbols, type, layout on a grid, hierarchy, colour coding, states, navigation, touch targets, sound and animation.
3. **Explain how each choice helps the user meet the objective** — a cause-and-effect chain, with evidence drawn from the example.
4. **Tie the answer back to the field’s four qualities** — **efficient, intuitive, satisfying, accessible** — and to the purpose and context of the interface.

Watch-out — decide which field you are actually in. One product can touch all four fields, and the marks follow the one you name. The **poster** advertising an app is a Message; the moulded **kiosk housing** a passenger touches is an Object; the **foyer** the kiosk stands in is an Environment; the **interface and the interaction** — what is on the screen and what happens when it is used — is the Interactive experience. Write about the interface and the user’s task, not about the hardware.

Watch-out — an interface is used, not viewed. Describing what a screen looks like is not enough. Start from the **objective of the user** and show how the design gets them to it. “It looks modern” earns nothing; “the next high tide is the largest element on the screen, so a swimmer has the answer without tapping anything” earns the mark.

Watch-out — keep the three vocabularies separate. A design **element** (colour, type, shape...), a design **principle** (hierarchy, contrast, figure–ground, balance...) and a **Gestalt** principle (proximity, similarity, closure, continuity, common fate, figure–ground, focal point) are three different things. Naming “proximity” and then explaining hierarchy loses the mark. Note that **figure–ground** appears in both lists — say which one you are using and stay in that vocabulary.

Watch-out — context is not the presentation format. The **context** is the setting and circumstances in which the interface is created, used or viewed — a phone held one-handed in bright sun on a beach; a kiosk used in a queue with a bus arriving; a directory read by a first-time visitor to a hospital. The **presentation format** is how the designer showed the solution to a stakeholder — a wireframe, a mock-up, a user flow, a UI kit. Naming the format does not answer a question about context.

Watch-out — name the aesthetic, and read the whole hierarchy. “It supports the aesthetic” earns nothing. Name the specific aesthetic (*calm, technological, natural, clinical, playful, premium*) and show which element and which principle produce it. Then work through the **primary, secondary and tertiary** layers of the screen rather than stopping at the largest thing on it.

Watch-out — methods, media and materials, in the final solution. The **method** is the manual or digital *process*, and it must be named in the Study Design’s own terms — **drawing** (here, digital drawing of screens, wireframes and icons), collage, **printing** (the printed face of a sign or totem), photography, model-making and prototyping; the **media** are the manual or digital applications used (pencil and marker; vector interface-design software); the **materials** are the surfaces or substrates the design is made on — the Study Design’s own list includes **touchscreen or digital interface**, and for signage, the printed sign face. Evaluate what is visible in the **final** solution, and distinguish **digital** from **manual**. Naming a software package as a “method” loses the mark — software is **media** — and so does naming **fabrication, installation or coding**, because building the thing is manufacturing, not a method on the Study Design’s list.

Watch-out — legal is not ethical. Copyright in the designer’s screens, icons, illustrations and written content arises **automatically** on creation; a **trademark** must be **registered** to be protected. Complying with the *Disability Discrimination Act 1992* (Cth) and with privacy law when the interface collects personal information is also **legal**. Designing beyond the legal minimum for users with disability, refusing to use deceptive patterns that trick a user into a purchase or a subscription, acknowledging sources of inspiration, and following the Australian Indigenous Design Charter and ICIP protocols before using Aboriginal and Torres Strait Islander imagery are **ethical** obligations. Do not put them in the same list.

Watch-out — static solutions. You present and analyse a **static** visual solution. Write about what the user sees and what is *intended* to happen when they act — annotated on the drawing — not about how the product is programmed. Functional prototypes are not required in this study.

Worked examples

Example 1 — scaffolded

Analyse the use and role of visual language in the TIDEBOOK home screen in helping a user meet their objective. (4 marks)

Working	Comment
TIDEBOOK is a tide and beach-conditions app — an outcome in the field of Interactive experiences . Its user is a swimmer or walker at Cape Harlow whose objective is to know, in a few seconds, whether it is a good time to go in the water.	Open by naming the field, the outcome type and the user’s objective . In this field the objective frames everything that follows.
Hierarchy. The next high tide — “1.8 m, 2:40 pm” — is set in the largest type, in the strongest tonal contrast, in a white card at the top of the screen. Four condition	Read the layers in order. Naming primary, secondary and tertiary is what turns description into analysis.

tiles sit below it as a secondary layer, and the full tide list is tertiary, smallest and lowest.

Icons with type, on a grid. Each condition tile repeats the same structure — icon, value, label — and all four align to the same margins, so the eye reads them as one comparable group rather than four unrelated facts. The icons share one stroke weight, and each is labelled, so an icon that could be misread (“what is 9?”) is settled by the word beneath it.

Colour used with words. The beach status is a green strip that also says “PATROLLED · FLAGS UP”, so the meaning survives for a user who cannot separate green from red — the design is **accessible**, not only decorative.

Together these choices let the user answer their question without a single tap, and the persistent tab bar tells them where to go next. That is the **role of visual language** here: it makes the experience **efficient, intuitive and accessible** by visual means alone.

Example 2 — scaffolded

Discuss two conventions applied in the SIGNAL wireframe that are characteristic of the field of Interactive experiences. (4 marks)

Convention 1 — the wireframe convention itself. The screen is drawn in flat greys: boxes for content blocks, a crossed rectangle standing in for the route map, ruled lines standing in for type. No colour, typeface or imagery is shown.

This is deliberate. At this stage the designer needs the operator to judge **what is on the screen and in what order** — title, map, then two primary actions — and a coloured, typeset screen would pull the conversation onto brand and photography before the structure is agreed. Stripping the surface away makes the hierarchy the only thing there is to comment on, and it keeps a structural change cheap.

Convention 2 — the stated artboard size. The sheet is marked “artboard 1920 × 1080 px”, fixing the screen the design is drawn for — a **landscape** kiosk display, not a portrait phone, which is why the wireframe is drawn wider than it is tall.

Everything on the screen is then measured against that canvas: how much content fits without scrolling, where the safe areas fall, what share of the width each of the two buttons takes, and what the type scale has to be to hold the hierarchy. Without a stated artboard the drawing is only a picture, and nothing on it has a size; with it, the developer builds the interface to exactly the dimensions the designer drew. Note the limit of the convention: pixels carry no physical size, so the panel the screen sits in and the housing the fabricator cuts are

Tie the **relationship of icons and type** (the Study Design’s own phrase) to how quickly the user can read the set.

Show a decision serving one of the field’s four qualities. This is the mark most students miss.

Close on the role of visual language, named in the Study Design’s terms.

“Discuss” = identify **and** explain how it is used, with evidence. Name the convention precisely.

The explanation must say what would go **wrong** without the convention. That is the “how it is used” half of the mark.

Choose a second convention from a different part of the field’s practice, not a near-duplicate of the first. State the orientation as well as the number.

Cause and effect, in the field’s own vocabulary. Link the convention to a decision someone else has to make — and be exact about what it does *not* settle. A pixel artboard is a screen convention; a physical touchpoint is dimensioned in millimetres.

specified separately, in **millimetres** — and it is that physical size, not the pixel count, that decides whether the type is legible at arm's length and whether a button is big enough for a fingertip.

Example 3 — unscaffolded

*Explain how the designer has made TIDEBOOK **intuitive** and **accessible**. (4 marks)*

An interface is **intuitive** when a user can operate it correctly the first time without being taught. TIDEBOOK is intuitive because it uses learned conventions in their conventional places: the magnifier symbol for search sits at the top right, the chevron at the top left goes back, and a persistent bar of four labelled destinations sits along the bottom of every screen so the user always knows where they are and how to return. Each condition tile is built to the same pattern — icon, value, label — so having read one, the user has learned how to read all four. Because the screen opens on the answer to the most common question rather than on a menu, no decision is required before the user gets what they came for.

The design is **accessible** because it does not depend on any single channel of perception or on fine motor control. The beach status is carried by colour *and* by the words “PATROLLED · FLAGS UP”, so it still reads for a user with a colour-vision deficiency; text sits at high contrast against white or against a dark teal ground rather than at low contrast on a photograph; every icon has a text label, which also gives a screen reader something to announce; and the tab controls are sized for a thumb with clear space between them, so a user with limited dexterity does not hit the wrong one. Accessibility here is a set of visual decisions, not an add-on (4 marks: both terms correctly defined, and each traced to specific decisions the designer made).

Example 4 — unscaffolded

Evaluate how effectively the SIGNAL presentation sheet communicates the resolved design to its stakeholders, referring to at least two presentation formats. (6 marks)

The sheet is effective because each format is aimed at a different stakeholder and the four together cover what the others leave out. The **user flow** gives the bus operator and the developer the whole task at a glance — idle screen, choose destination, the concession branch, pay, collect — so a gap in the service (“what happens if the card is declined?”) can be found before a single screen is drawn. The **wireframe** settles structure and priority in flat grey, with the artboard size stated, so comment stays on what matters at that stage. The **mock-up** then shows the operator exactly what a passenger will see, in colour and at size, including the two primary actions and the “you are here” marker on the route map. The **UI kit** is the format that makes the design buildable: hex values, a type scale and three button states mean the development team produces the same button the designer drew rather than an approximation.

There are limitations. Every format on the sheet is **static**, so none of them shows timing — how long the payment confirmation stays on screen, or what a passenger sees while the network is slow — and those are exactly the moments where a kiosk experience fails. The mock-up is also the most persuasive and least tested artefact: it shows the interface in ideal light, with short button labels and a simplified route map, so a stakeholder can approve a screen that will not survive glare, a long place name at the destination step, or a queue. Nor does the sheet include a journey map, so the touchpoints either side of the kiosk — finding it, and boarding with the ticket — are not addressed.

Overall, because the sheet moves from structure to surface to specification and each format is drawn to the field's conventions, it communicates the resolved design effectively to operator and developer alike — with the caveat that it should be read alongside user testing of the interactions the static formats cannot show (6 marks: at least two formats analysed for specific stakeholders; evidence from the sheet; limitations; an overall judgement).

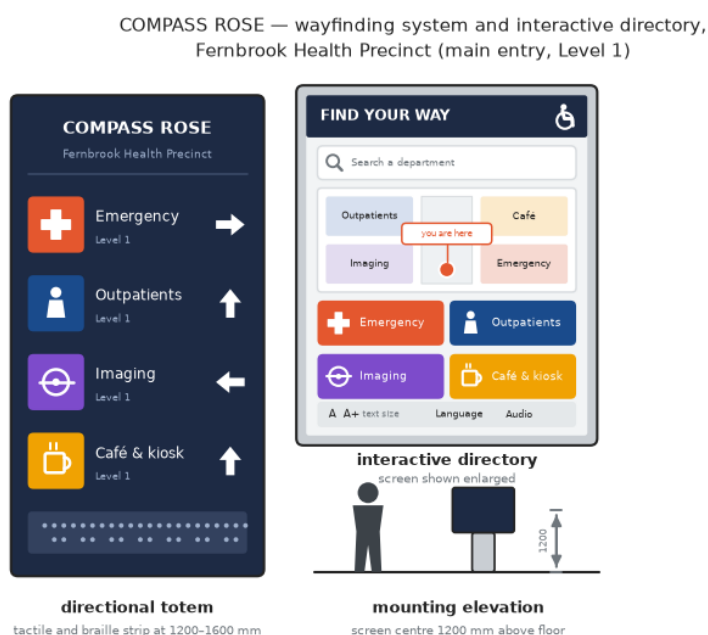
Practice questions

Scaffolded

Q1. Using the TIDEBOOK app: (a) Identify the field of design practice to which it belongs. (1 mark) (b) Name the type of design outcome it is, using a category listed for that field. (1 mark) (c) State the objective of the user the app is designed for, and name one context in which it is used. (2 marks)

- Q2.** Using the annotated breakdown of the TIDEBOOK home screen: (a) Identify the primary, secondary and tertiary layers of information. (3 marks) (b) Describe the sequence of screens and actions a user moves through to check Sunday's high tide. (2 marks)
- Q3.** Using the SIGNAL presentation sheet: (a) Name the four presentation formats shown. (2 marks) (b) Identify two conventions used in the **user-flow diagram**. (2 marks) (c) Explain how the **mock-up** shows a passenger which parts of the screen can be acted on and which are only information. (2 marks)
- Q4.** (a) State the four qualities the Study Design says visual language helps interactive experiences achieve. (2 marks) (b) For **efficient** and **satisfying**, name one decision in TIDEBOOK that delivers it. (2 marks)
- Q5.** (a) Distinguish between an **icon** and a **symbol**. (2 marks) (b) With reference to TIDEBOOK, explain why the designer has paired every icon with a text label. (2 marks)
- Q6.** Distinguish between the **context** in which TIDEBOOK is used and the **presentation formats** a designer would use to present it to a client. (3 marks)

Un scaffolded



Questions 7–21 refer to the COMPASS ROSE wayfinding system shown above, unless otherwise stated. It is the wayfinding and interactive directory system for the main entry of Fernbrook Health Precinct, made up of colour-coded directional totems and a touchscreen directory mounted with its screen centre 1200 mm above the floor.

- Q7.** COMPASS ROSE could be mistaken for an outcome in the field of Messages. Explain why it is better described as an outcome in the field of **Interactive experiences**, and describe two features of the design that are typical of that field. (3 marks)
- Q8.** Analyse how **one design element** and **one design principle** have been used to support the aesthetic decisions in COMPASS ROSE. Name the aesthetic. (4 marks)
- Q9.** Explain how the **context** in which COMPASS ROSE is used has influenced three of the designer's decisions. (3 marks)
- Q10.** Evaluate the **accessibility** and **usability** of COMPASS ROSE for a diverse range of users. (4 marks)
- Q11.** Discuss how the **icons and symbols** in COMPASS ROSE communicate to a visitor who reads little English, and explain why consistency across an icon set is a convention of this field. (3 marks)

- Q12.** Explain how **animation** and **sound** could extend the visual language of the COMPASS ROSE directory, and state one limitation of presenting these in a static design solution. *(3 marks)*
- Q13.** Explain the role of one **specialist** the designer of COMPASS ROSE would work with, and how that specialist's knowledge would shape the design. *(3 marks)*
- Q14.** Explain one **legal** and one **ethical** obligation the designer of COMPASS ROSE must meet. *(4 marks)*
- Q15.** Explain how **one** technological, economic, cultural, environmental or social factor may have influenced the designer's decisions for COMPASS ROSE. *(4 marks)*
- Q16.** Evaluate the application of **methods, media and materials** in the final COMPASS ROSE solution. *(4 marks)*
- Q17.** Describe **two** presentation formats, other than the mock-up shown, that the designer could use to present COMPASS ROSE to the health service, and justify each. *(4 marks)*
- Q18.** Compare TIDEBOOK and COMPASS ROSE as design outcomes in the field of Interactive experiences, referring to their purposes, their visual language and the contexts in which they are used. *(6 marks)*
- Q19.** Identify **one Gestalt principle** used in the COMPASS ROSE directory screen and discuss how it has been used. *(4 marks)*
- Q20.** The field of Interactive experiences covers experiences in the physical world as well as online. Explain how the **conventions** and **presentation formats** used for a physical customer touchpoint differ from those used for a mobile app, and name one of each that is common to both. *(4 marks)*
- Q21.** Choose **one** of the three interfaces in this subtopic. Evaluate how effectively it reflects conceptions of **good design**, referring to a named conception and to the purpose and context of the interface. *(6 marks)*

Answers

Q1. (a) Interactive experiences. (b) An app (a digital-device interface). (c) To find out quickly whether conditions suit swimming/walking; used outdoors at the beach, one-handed, in bright light. **Q2.** (a) Primary = the next high tide (1.8 m, 2:40 pm); secondary = the four condition tiles; tertiary = the today's-tides list. (b) Tap "Tides" in the tab bar → the tide screen opens on the 7-day view → read the Sunday row of the list, or the second peak of the curve. **Q3.** (a) User flow; wireframe; mock-up (high fidelity); UI kit / style tile. (b) Any two of: a rectangle for a screen; a diamond for a decision; arrows for transitions; branches labelled yes/no; a single start point. (c) See solutions. **Q4.** (a) Efficient, intuitive, satisfying, accessible. (b) See solutions. **Q5.** (a) An icon resembles what it represents; a symbol stands for something by convention and must be learned. (b) See solutions. **Q6.** Context = held one-handed outdoors at the beach, in glare, in a hurry before swimming; presentation formats = wireframes, user flows, mock-ups, a UI kit shown to the client. **Q7–Q21.** See fully-worked solutions.

Fully-worked solutions

Q1. (a) **Interactive experiences.** (b) It is an **app** — an interface on a digital device, one of the categories the Study Design lists for this field (accept: a mobile interface). (c) The user's **objective** is to find out quickly whether it is a good time to swim or walk — the state of the tide and the beach — without having to search or interpret data. The **context** is outdoors at Cape Harlow: the phone is held one-handed, often in bright sun and wind, in the moments before the user goes into the water (2 marks: *an objective stated as what the user is trying to do, plus a specific context of use*).

Q2. (a) **Primary** = the next high tide, "1.8 m / 2:40 pm", set in the largest type with the strongest tonal contrast in a card at the top of the screen. **Secondary** = the four condition tiles (swell, wind, water temperature, UV), each icon + value + label. **Tertiary** = the "Today's tides" list, smallest type, lowest on the screen. (Accept the beach-status strip as part of the primary or secondary layer if justified.) (b) The user taps "**Tides**" in the persistent tab bar; the tide screen opens with the **7-day segment already selected**, showing the curve and a dated list; the user reads the **Sunday** row of the list ("High 3:22 pm, 1.7 m"), or the second peak of the curve, which sits directly above the "Sun" label on the axis. The chevron at the top left returns them to the home screen (2 marks: *the sequence described as a set of screens and actions, not as two separate pictures*).

Q3. (a) A **user flow**; a **wireframe**; a **mock-up** (high-fidelity static screen); a **UI kit / style tile**. (b) Any two of: a **rectangle for each screen or state**; a **diamond for a decision point** ("concession?"); **arrows showing transitions** between screens; **labelled branches** (yes/no); a single **start point** (the idle screen). (c) The mock-up works by **affordance and signifiers**. The two actions — "Buy ticket" and "Top up card" — are drawn as filled, rounded rectangles in saturated colour with a centred white label, sitting side by side along the bottom of the screen where the hand falls: fill, shape and position together make them *look* pressable. Everything else is pitched down — the route map sits in a pale, low-contrast panel behind a hairline rule, the "you are here" marker is a plain dot with a small label, and "Where are you going?" is type on the header band — so none of it carries the saturated fill, the rounded container or the bold centred label that mark a control. The passenger can therefore tell what the screen wants them to do without touching anything to find out (2 marks: *the signifiers named, and the contrast with what is only information*).

Q4. (a) **Efficient, intuitive, satisfying and accessible.** (b) **Efficient** — the single fact the user came for is on the screen the moment the app opens, so the task takes no taps at all. **Satisfying** — the tide curve turns a table of numbers into a shape that can be read at a glance, and the green "PATROLLED · FLAGS UP" strip gives a clear, reassuring answer rather than raw data, so the user leaves the app confident (2 marks: *one specific decision per quality*).

Q5. (a) An **icon** is a simplified picture that **resembles** what it stands for, so it can be understood without prior learning — the wave for swell. A **symbol** stands for something by **convention** and has to be **learned** — the magnifier for "search" does not look like searching. (b) Icons are read faster than words and survive being seen small or at a distance, but they are **ambiguous**: a sun could mean UV, sunrise, weather or brightness, and a number beside it means nothing on its own. Pairing each icon with a label removes the ambiguity, gives a screen reader something to announce for a user who cannot see the icon, and keeps the four tiles comparable because each is built the same way (2 marks: *the limitation of icons + at least one benefit of the pairing*).

Q6. **Context** is the setting and circumstances in which the interface is created, used or viewed: TIDEBOOK is used outdoors at the beach, on a phone held one-handed, in glare and wind, usually in a hurry immediately before someone goes into the water — which is why the type is large, the contrast high and the answer given without a tap.

Presentation formats are the forms in which the designer shows the solution to the client: wireframes, a user-flow diagram, high-fidelity mock-ups in a device frame, and a UI kit. The first describes *where and how the design is used*; the second describes *how the design was presented* — naming a mock-up does not answer a question about context (3 marks: both terms defined and applied to TIDEBOOK, and the distinction made explicit).

Q7. COMPASS ROSE carries type, colour and symbols on a sign face, so it looks like a Message. It is better described as an outcome in the field of **Interactive experiences** because it exists to meet the **objective of a user** who is trying to *do* something — get to a department — and it is **used** rather than viewed: the visitor consults it, makes a decision, walks, and consults the next one, so the design is a **sequence of decision points along a route**, and part of the system is a **touchscreen** the visitor operates directly. Two features typical of the field: a **“you are here” marker** on the directory plan, which orients the user within the system before they choose; and **colour-coded destinations repeated consistently** across totem, plan and buttons, so the user can follow one colour through the building — a navigation convention, not decoration (3 marks: the field justified by user objective and use over time, plus two field-typical features).

Q8. COMPASS ROSE has a **calm, clear, reassuring clinical** aesthetic — deliberately quiet, because its users are often anxious. The **element of colour** is used with the **principle of figure-ground**: a dark navy ground carries white type and four saturated colour chips (red, blue, purple, amber), so each destination separates cleanly from the background and from its neighbours. Because the ground is dark and unmodulated and the type is white, the tonal difference is extreme, and the sign stays legible across a foyer and under whatever lighting the building provides. The saturated chips are small and consistent rather than large and decorative, so the design reads as ordered and controlled instead of busy — which is what makes it calming as well as legible. Colour also does navigational work: red is reserved for Emergency, so the most urgent destination is the one the eye finds first, supporting the reassuring, competent character of the system (4 marks: aesthetic named; one element and one principle named; the mechanism explained; linked to users and purpose).

Q9. The **context** is the main entry of a health precinct: first-time visitors, many of them unwell, anxious, elderly, in pain or carrying children, arriving in a crowded foyer and needing to make a decision immediately. Three decisions follow from it. First, the **primary information is reduced to four destinations** with a level and an arrow — a stressed visitor cannot process a full directory, so the totem answers only the question “which way now?”. Second, **Emergency is given the strongest colour and the top position**, because in this context the cost of a person failing to find it is highest. Third, the **directory offers text-size, language and audio controls**, because a public hospital entry serves a community with many first languages and a wide range of vision (3 marks: context defined as setting and circumstances of use, then three decisions traced to it).

Q10. COMPASS ROSE is largely accessible and usable, with a limitation. Its **strengths**: the directory carries a **text-size control**, a **language control** and an **audio** option, so users with low vision or limited English are not locked out; destination buttons are **large, well spaced and pair an icon with a word**, so they can be hit accurately by a user with limited dexterity and understood by a user who reads little; the totem carries a **tactile and braille strip at 1200–1600 mm** for visitors who are blind or have low vision; and colour is never asked to carry meaning alone — every colour chip is accompanied by a name, a level and an arrow. **Usability** is supported by the “you are here” marker, which orients the visitor before they choose, and by the same four destinations appearing in the same colours on the totem, the plan and the buttons, so the system teaches itself.

The main **limitation** is physical: the screen is centred at **1200 mm** above the floor, which suits a standing adult but places the top of the screen beyond comfortable reach and viewing angle for a seated wheelchair user or a child, and there is no second interface at a lower height. A second limitation is that the audio option is offered on the screen only, so a visitor who cannot read the screen may not discover it. **Overall**, the system is effective and inclusive for most users, but a lower mounting height or a duplicate control zone would be needed before it could be called accessible to all (4 marks: strengths with evidence, at least one genuine limitation, an overall judgement).

Q11. The **icons and symbols** carry the meaning when the words cannot. A visitor who reads little English can still recognise the **cross** as medical or emergency, the **cup** as food and drink and the **figure** as a person or patient service, because these are learned public symbols used with their conventional meanings; the solid **arrows** are read as direction by anyone, and the **colour coding** lets the visitor match the chip on the totem to the button and the zone on the plan without reading at all. The system also offers a language control, so the symbols carry the visitor to the point where the words can be changed.

Consistency across the icon set is a convention of this field because a set is read as a set: one stroke weight, one corner radius and one optical size mean the four icons are perceived as members of one system (**similarity**), so a user learns the visual “language” once and applies it everywhere. If one icon were fine-lined and another solid, the difference would read as a difference in *meaning* or importance that the designer did not intend (3 marks: *symbols explained as learned and cross-lingual; consistency explained as a system that must be learned once*).

Q12. Animation could carry change and direction that a static sign cannot: the route from “you are here” to the chosen department could draw itself along the corridor on the plan, so the visitor sees the order of the turns rather than having to infer it; the pressed button could change state visibly, confirming the tap; and a slide transition from the map to the route could tell the user they have moved forward and can come back. **Sound** could confirm each press for a user who cannot see the screen, and read the directions aloud through the audio option, so the information is available in a second channel rather than only by sight.

The limitation of a **static design solution** is that neither can actually be shown: timing, duration, sequence and sound have to be *described* in annotations or implied by a storyboard of frames, so a stakeholder approves a written intention rather than the experience itself, and problems of pace — an animation too fast for an older visitor to follow — cannot be found until it is built and tested (3 marks: *a specific role for each of animation and sound, plus the limitation of static presentation*).

Q13. A specialist contributes specialist knowledge the designer does not have. For COMPASS ROSE the designer would work with an **accessibility specialist** (or an access consultant), whose knowledge of the *Disability Discrimination Act 1992* (Cth) and the Australian Standards for access covers mounting heights and reach ranges, minimum letter heights for a stated viewing distance, contrast requirements, and the placement and formatting of tactile and braille signage. That knowledge would shape the design directly: it would set the height at which the touchscreen and its controls sit, raise the minimum type size on the totem, fix the position of the braille strip at 1200–1600 mm, and require that no destination be identified by colour alone. (Accept instead a **signage fabricator** whose knowledge of substrates and finishes would drive the choice of a non-glare face and durable fixings, a **UX researcher**, or a **front-end developer**.) Note that the health service, the nurses and the visitors are **stakeholders**, not specialists (3 marks: *a genuine specialist named, their specialist knowledge stated, and at least one design decision traced to it*).

Q14. A legal obligation: the interface and signage must comply with the **Disability Discrimination Act 1992** (Cth), which makes it unlawful to provide a public service in a way that discriminates against people with disability — so accessible mounting, legible contrast and tactile signage are a legal requirement in this setting, not a courtesy. (Accept also: **copyright**, which protects the designer’s original icons, illustrations and screen layouts **automatically on creation**, with no registration needed, so any purchased or sourced icon set must be properly licensed; or a **registered trademark**, which — unlike copyright — must be **registered** to be protected, if the health service’s mark is applied to the signs.)

An **ethical obligation:** if the precinct includes an Aboriginal and Torres Strait Islander health service or the designer proposes to use Aboriginal or Torres Strait Islander imagery, colour or language on the totems, the designer should follow the **Australian Indigenous Design Charter** and ICIP protocols — consulting and obtaining consent from the relevant community, ensuring the representation is accurate and attributed, and paying for the cultural knowledge used. This is an **ethical** framework rather than a law. (Accept also: an ethical duty not to prioritise a paying private clinic above Emergency on the sign, or to design honestly for users who are unwell rather than for the client’s marketing.) (4 marks: *one legal and one ethical obligation, correctly classified, each explained in context*.)

Q15. (Model answer using the technological factor.) The **technological** factor — the availability of a durable networked touchscreen whose content can be updated centrally, alongside a printed sign that cannot — has shaped what the designer decided to do, not merely made an interactive directory possible. Because one half of the system can be changed remotely and the other cannot, the designer **split the information between the two technologies**: the printed totem carries only the four permanent zones, each with a level and an arrow, while everything that changes — individual departments, clinic names, temporary closures — sits on the screen behind a “**Search a department**” field. The touchscreen also settled the form of the controls: with no cursor, no hover state and an imprecise fingertip, the designer drew **four large, well-spaced destination buttons** rather than a scrolling list, and placed the **text-size, language and audio controls** on the screen, because software can offer alternatives that a printed panel cannot. Finally, because the same four hues have to appear on an emissive screen *and* on a printed face, the designer **specified the colour twice** — in RGB/hex for the interface and as a print colour for the totem — so the colour coding still matches across the two technologies. (Accept **social** — a community of recent arrivals with limited English, older

visitors and people arriving in distress, driving the four-destination limit, the learned symbols and the plain-language wording; **economic** — a limited public health budget favouring durable printed totems with one screen rather than screens throughout; **environmental** — durable, cleanable, low-energy materials and long-life fittings; or **cultural** — Aboriginal and Torres Strait Islander language and artwork on the wayfinding, or multilingual content.) (4 marks: one factor named in the Study Design’s exact terms, and its influence traced to specific decisions the designer made.)

Q16. The application of methods, media and materials in the final solution is effective. The **methods** visible in the resolved outcome are **digital drawing** — the vector icons, the simplified plan, the aligned chip-and-arrow rows and the screen layout are all drawn on screen — and **printing**, because the face of the totem is a large-format printed graphic with an applied tactile and braille strip. Both are **digital** methods; no manual method survives into the final solution. The **media** are **digital**: vector interface and layout software used to draw the icons, set the type and specify the screen in RGB, with pigment inks laid down by the large-format printer for the totem. The **materials** are the **printed sign face** on the totem, with the applied tactile and braille strip, and the **touchscreen / digital interface** of the directory — the Study Design’s own material category for this field.

They work well together: vector media give icons that stay crisp at any size, so the same drawing serves a small button and a large sign face; a matt, durable sign face suits a foyer where glare and cleaning are constant; and a touchscreen allows content to be updated when a department moves, which a printed totem cannot. The limitation is the pairing of the two: because one part of the system is fixed print and the other is an updatable screen, they will drift out of step unless the totems are reprinted whenever the screen content changes, and a touchscreen in a hospital foyer introduces hygiene and failure risks that a printed sign does not. Note that these are the methods and media **visible in the final solution**, named in the Study Design’s own terms, not the ideation sketching used earlier — and that fabricating and installing the totem and the screen housing is manufacturing, not a design method (4 marks: MMM correctly separated, digital and manual distinguished, judged in the final solution, strengths and a limitation).

Q17. 1. A user-flow diagram (or sitemap). This would show the whole directory task — idle screen, search or choose a destination, view the route, return to idle — with each decision point marked. It is justified because the health service needs to be confident that a visitor cannot get stranded on a screen with no way back, and because the flow can be checked and approved before any screen is styled or any sign is printed, which is far cheaper than changing fabricated signage.

2. A storyboard of the visitor journey. A sequence of frames showing the visitor arriving at the entry, reading the totem, using the directory, and meeting the next sign at the corridor junction. It is justified because wayfinding is only successful **as a sequence**: a single screen cannot show that the colour and symbol for Imaging reappear at every decision point along the route. The storyboard lets the client test whether the system answers the question again at each junction, which is exactly where wayfinding usually fails. (Accept also: a **journey map**, a **UI kit** for the touchscreen, a **scale elevation** of the totem in situ, or a **wireframe** set.) (4 marks: two formats described accurately, each justified against a stakeholder need — not simply named.)

Q18. Both TIDEBOOK and COMPASS ROSE are outcomes in the field of **Interactive experiences**, and both are built to meet a user’s objective quickly; but the purpose, the visual language and the context of each pull the designs in different directions.

Their **purposes** are alike in kind and different in stakes. Both answer a single question for a user who does not want to browse: TIDEBOOK answers “is it a good time to go in the water?”, COMPASS ROSE answers “which way now?”. TIDEBOOK, though, serves a discretionary, repeated, everyday decision, while COMPASS ROSE serves a first-time, often urgent decision, so its consequence of failure is far greater.

Their **visual language** shares the field’s core vocabulary — hierarchy, layout on a grid, icons paired with type, colour used with words, and a “where am I” cue. The differences follow from the sequence each supports. TIDEBOOK is a hierarchy *within* a screen and *between* screens: a persistent tab bar, a back chevron and a segmented control let the user move deeper and return. COMPASS ROSE is a hierarchy *through a building*: colour codes are repeated on the totem, the plan and the buttons so the user can carry one colour along a route, and a “you are here” marker locates them in physical space rather than in a menu.

Their **contexts** differ most. TIDEBOOK is used on a personal device, held one-handed in glare and wind, by a user who can zoom, retry and consult it repeatedly. COMPASS ROSE is fixed in a shared public foyer at a set mounting height, used once, in a crowd, often by a person who is unwell or anxious and cannot change the type size on their

own device — which is why COMPASS ROSE carries tactile, braille, language and audio provisions that an app leaves to the phone’s operating system.

Overall, the comparison shows the field’s constant — visual language organised around a user’s objective and a sequence of decisions — and the field’s variable: the physical touchpoint must carry its own accessibility, while the app can borrow it from the device *(6 marks: purposes, visual language and contexts each treated for both examples, with similarities and differences drawn out)*.

Q19. The Gestalt principle of **similarity** is used in the COMPASS ROSE directory screen. The four destination buttons are drawn to the same size, the same rounded shape and the same internal pattern — a white icon at the left, a white word beside it — differing only in hue. Because the mind groups elements that share visual characteristics, the visitor perceives the four as **one set of choices of equal type**, so they are scanned as a group rather than read one at a time, and a fifth element added in that style would automatically be understood as another destination. The same principle is at work between the totem and the screen: the chip-plus-icon-plus-word pattern is repeated in both, so the visitor recognises the button as “the same thing” they saw on the totem.

(Accept **proximity** — the map, the buttons and the accessibility controls are separated by clear space, so each is read as a distinct group; **figure–ground** — the white type and icons separate sharply from the saturated chips and the navy header; **focal point** — the red “you are here” dot on a pale plan; or **common fate** if animation is argued.) Note that similarity is a **Gestalt** principle describing how the mind organises what it sees; the *hierarchy* it supports is a design **principle**, and the *colour* it works on is a design **element** *(4 marks: a Gestalt principle correctly named, located in the example with evidence, its perceptual effect explained, and the vocabularies kept distinct)*.

Q20. The **conventions** differ because a physical touchpoint cannot be adapted by the person using it. An app is drawn to a **stated artboard in pixels** with safe areas and **responsive breakpoints**, and its accessibility conventions are expressed digitally — minimum touch target, contrast ratio, scalable type. A physical touchpoint is instead drawn to **real dimensions in millimetres at a stated scale**: letter heights are set against a stated **viewing distance**, the **mounting height and reach range** are specified because the hardware is fixed, **tactile and braille signage** must be provided to Australian Standards because there is no personal device to supply an alternative, and a **materials and finishes specification** governs glare, durability and cleaning.

The **presentation formats** differ accordingly. A physical touchpoint is also presented as **scale elevations** and a **site or floor plan showing every sign location**, a **finishes board or specification**, and a **storyboard or journey map** of the route through the building — none of which an app requires. An app is presented with **device mock-ups** and screen sets at each responsive breakpoint, which a fixed touchpoint does not need.

Common to both: the **user-flow (or wireframe) convention** — a rectangle for a screen, a diamond for a decision — is used for either, and the **high-fidelity mock-up** is a presentation format both share *(4 marks: a congruent two-sided treatment of conventions and of formats, plus one shared example of each)*.

Q21. *(Model, using COMPASS ROSE and Dieter Rams’ Ten Principles for Good Design.)* COMPASS ROSE reflects conceptions of good design well, on the terms Rams sets out. Its **purpose** is to let a visitor to Fernbrook Health Precinct reach a department without help, and its **context** is a busy public entry used by first-time visitors who are frequently unwell, anxious or unfamiliar with English.

Against Rams’ principles, the system is strong where it matters most. It is **useful** and **understandable**: four destinations, each with a colour chip, a symbol, a word, a level and an arrow, answer the visitor’s only question at the moment they ask it, and the “you are here” marker makes the plan self-explaining. It is **unobtrusive** — the navy ground, the restrained type and the small saturated chips let the system recede until it is needed, which suits a place where people are not there to admire signage. It is **honest**: it does not promise a route it cannot deliver, and it does not privilege a commercial tenant over Emergency. And it is close to Rams’ “**as little design as possible**”, carrying only what is needed to make one decision.

It is weaker on **long-lasting** and on **thorough down to the last detail**. The printed totems and the updatable touchscreen will drift apart whenever a department moves, unless reprinting is budgeted; and the screen centred at 1200 mm serves a standing adult better than a seated user or a child, so the detail of the mounting undercuts the inclusiveness of the interface design.

Overall, judged against its purpose and its context, COMPASS ROSE reflects good design effectively: it makes a hard task easy for a stressed user by the most economical visual means. To be fully consistent with the conception, the designer would need to resolve the mounting height and plan for the system's maintenance over time *(6 marks: purpose and context stated; a named conception of good design applied point by point; strengths and limitations with evidence; an overall judgement)*.