

2.3 CSS and responsive design

Name: _____ Class: _____ Date: _____ **Total: 12 marks**

KEY WORDS CSS 层叠样式表 • selector 选择器 • box model 盒模型
• responsive design 响应式设计

Objective

Use CSS to create maintainable, responsive page layouts.

You must be able to:

- identify selectors and declarations
- distinguish margin from padding
- choose flexible sizing for a small screen

1 Worked examples

■ Let the layout adapt

In `max-width: 400px; width: 100%;`, the card can fill a narrow screen but never become wider than 400 pixels. This is more flexible than a fixed width.

In the **box model** 盒模型, padding is inside the border; margin is outside it. Use padding for space within a card and margin for space between cards.

2 Practice

2.1 State what a CSS selector chooses. [1]

2.2 State whether padding is inside or outside an element’s border. [1]

2.3 Explain why `width: 100%; max-width: 400px;` can suit more screens than `width: 400px;`. [2]

3 Exam-style questions

3.1 A card overflows on a phone because it has `width: 600px`. Recommend a CSS change and justify it. [4]

3.2 Explain why a developer should avoid using `!important` repeatedly to solve style conflicts. [4]

Solutions

2.1

- The element or elements to style.

2.2

- Inside.

2.3

- It can shrink to the screen width.
- It still prevents the card becoming too wide on a large screen.

3.1

- Use `width: 100%; max-width: 600px;`.
- The card can shrink on a narrow phone screen.
- It remains limited on a wider screen.
- This is responsive design rather than a fixed-size patch.

3.2

- It forces a rule to win without solving the real specificity conflict.
- Later changes may need another `!important`.
- The stylesheet becomes difficult to maintain or predict.
- A clearer selector or rule structure is a better fix.