

1.3 Sensation, perception, and thresholds

Name: _____ Class: _____ Date: _____

Total: 12 marks

KEY WORDS sensation 感觉 • perception 知觉 • absolute threshold 绝对阈限
• difference threshold 差别阈限

Objective

Distinguish sensation from perception and apply absolute and difference thresholds.

You must be able to:

- define sensation and perception
- distinguish absolute from difference threshold
- explain why difference thresholds depend on the starting level

1 Worked examples

■ Detect first; interpret second

Sensation 感觉 is a sense organ detecting a stimulus. **Perception** 知觉 is the brain interpreting it. Light reaching an eye is sensation; recognising a friend's face is perception.

An **absolute threshold** 绝对阈限 is the smallest stimulus detected at all. A **difference threshold** 差别阈限 is the smallest change noticed. One extra candle is easier to notice in a dark room than in a bright room.

2 Practice

2.1 Define sensation.

[1]

2.2 Define a difference threshold.

[1]

2.3 Explain why recognising a face is perception rather than sensation. [2]

3 Exam-style questions

3.1 Explain why adding one candle is more noticeable in a room with two candles than in a room with fifty. [4]

3.2 Compare an absolute threshold with a difference threshold. [4]

Solutions

2.1

- Detection of a stimulus by a sense organ.

2.2

- The smallest change in a stimulus that can be noticed.

2.3

- The eye detects light from the face.
- The brain interprets that information as a particular person.

3.1

- The difference threshold is proportional to the starting stimulus.
- One extra candle is a large change from two.
- It is a small change from fifty.
- Therefore it is more likely to be detected in the darker room.

3.2

- Both concern detecting stimuli.
- An absolute threshold is the smallest stimulus detected at all.
- A difference threshold is the smallest change detected.
- One asks whether a stimulus is detected; the other asks whether a change is noticed.