WORKSHEET

A15.8 A revision plan and mixed practice

Exam preparation · A level · OCR H446 2.2.1, AQA 7517 4.4.1.2, Eduqas A500QS 1.8 · about 40 min

Name _____ Class _____ Date _____

What this lesson is about

Mapping the specification, retrieval, spacing and interleaving, and a spaced repetition scheduler for the whole course.

- Start from the specification
- Three methods that work
- Using past papers well
- A plan across the year
- Mixed practice across the course
- Spaced repetition with boxes

Questions

5 marks in all

1. Which revision method is retrieval practice? [1 mark]

- ☐ **A** Writing down everything you know about a topic from memory, then checking
- ☐ **B** Rereading your notes on the topic
- ☐ **C** Highlighting the lesson
- ☐ **D** Copying out the mark scheme

2. What is interleaving? [1 mark]

- ☐ **A** Mixing different topics within one revision session
- ☐ **B** Revising one topic until it is perfect before starting another
- ☐ **C** Revising late at night
- ☐ **D** Reading two textbooks at once

3. In the Leitner system, what happens to a card you answer wrongly? [1 mark]

- ☐ **A** It goes back to box 1, so you see it again soon
- ☐ **B** It moves up a box
- ☐ **C** It is removed
- ☐ **D** It stays where it is

4. A card follows the Leitner rules with intervals 1, 2 and 4 days. What does this print? [1 mark]

```
INTERVAL = {1: 1, 2: 2, 3: 4}
box, day = 1, 1
for correct in [True, True, True, False]:
    box = min(box + 1, 3) if correct else 1
    day = day + INTERVAL[box]
    print(box, day)
```

5. Put the steps for using a past paper question in order. [1 mark]

Number the lines 1 to 4 to put them in the right order.

___ `Read the examiners' report for it`

___ `Mark it strictly with the mark scheme`

___ `Answer it under time, closed book`

___ `Record the mistake and schedule the topic again`

The task: the revision scheduler

Schedule revision with the Leitner system for eight days. - `INTERVAL` maps a box number (1, 2 or 3) to the number of days until a card in that box is next due. - `cards` is a list of topic names (strings), in the order they are reviewed on any day. - `answers` maps each card to a list of `True` (answered correctly) and `False` (answered wrongly), in the order the card is reviewed. Every card has enough answers for the eight days. Every card starts in box 1, due on day 1. For each day from 1 to `DAYS`, go through `cards` in order and review each card that is due that day: take its next answer from the **front** of its list with `pop(0)`; if it is correct move the card up one box (to at most 3), otherwise put it in box 1; then set it due on the current day plus the `INTERVAL` of its new box. Print `day <d>: <cards>`, the cards reviewed that day separated by `, `, or `day <d>: rest` if none were due. After day `DAYS`, print a line for each box from 1 to 3: `box <n>: <cards>`, the cards in that box in the order of `cards`, separated by `, `, or `box <n>: empty`. The robot stays still.

```
# the two lines every program starts with: the commands, then the robot
from bugbot import *
connect()

INTERVAL = {1: 1, 2: 2, 3: 4}
DAYS = 8
cards = ["binary search", "two's complement", "RIPA 2000", "Dijkstra"]
answers = {
    "binary search": [True, True, True],
    "two's complement": [False, True, True, False],
    "RIPA 2000": [True, False, True, True],
    "Dijkstra": [False, False, True, True],
}
```

Plan your program here, then type it in and press Run.

Do it on the robot

www.bugbotlab.com/learn/a15-8-revision-plan/

The simulator checks it and tells you when it passes. Nothing to install, no account.

Challenges

1. Make your own specification checklist for one module, rate every point, and turn the red and amber points into cards for the scheduler.
2. Add a box 4 with an interval of 8 days. How does it change when `binary search` is next seen?
3. Answer two of the mixed practice questions under time, then mark them against the lessons they name.