GCSE Revision Video 91

- **Prior Checklist:** A pack of A5/A6 revision cards.

  A pen.

- **Our Video Structure:**

  Back to Basics: Quick re-cap.

  Core: *Create* your own revision cards with exam style questions.

  Let's Do It!: *Apply* your revision cards to another set of exam style questions.

Instructions: **Print out** this worksheet and watch the revision video simultaneously.

Pause and Play the video unlimited times to review your work and write the answers in the blank spaces. Once you have written your answers, check these with the tutorial answers, as explained in the video.

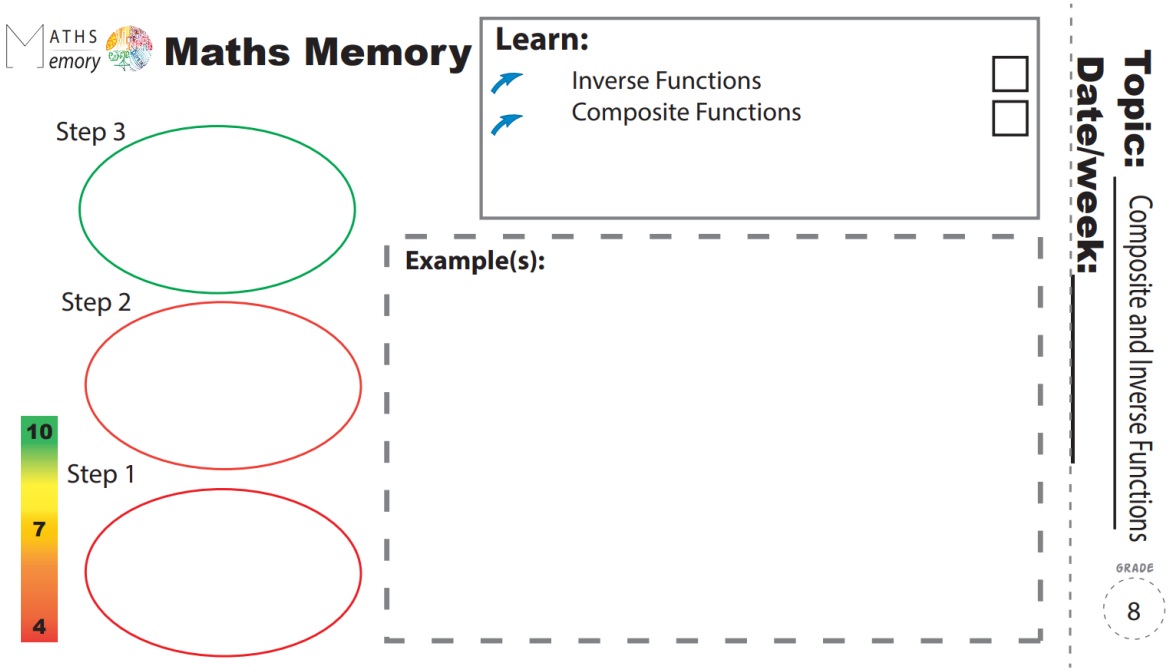
Create your OWN revision cards when prompted on the worksheet (Back to Basic and Core sections).

Apply your OWN revision cards (Let's Do It! section).

Self Assess yourself (Out of 10) on your revision planner after you have completed the revision video.

WATCH this revision video and MANY others on our FULL courses at www.mathsmemory.co.uk

Let's get started and create our Master revision card with this suggested template.



Back to Basics- Starter questions to warm you up

Back to Basics

Topic: Composite and Inverse Functions

Question 1

Find $f(x)=3x^2-2$

a) f(5)

b)f(-2)

MATHS Memory

Core 1

Topic: Composite and Inverse Functions

Question 1

Find $f(x)=4x^2+2$

a) $f^{-1}(x)$

b) Solve $f^{-1}(18)$

c) Solve $h^{-1}(x) = f(x)$ $h(x)=\frac{x-1}{4}$

Grade 7 (6 Marks)

Let's get our revision card and create Section A. Look at video for guidance.

Let's get our revision card and create Section B. Look at video for guidance.

MATHS emory

Core 2

Topic: Composite and Inverse Functions

Question 2

$f(x)=2x+1$ $g(x)=x^2-2$

d) $gf^{-1}(x)$

e) Given that $2gf(x) = fg(x)$
Show that $6x^2 + 8x + 1 = 0$

Grade 8 (4 Marks)

Question 3

$f(x)=4x+2$ $g(x)= ax+b$

$g(2) = 10$ and $f^{-1}(18) = g(1)$
Find the value of a and b.

Grade 8 (4 Marks)

Let's Do It!- Apply your revision cards to another set of exam style questions

MATHS memory

Let's Do It!

Topic: Composite and Inverse Functions

Question 1

$f(x)=2(x-4)$

$g(x)=\frac{x+1}{4}$

Find

a) f(3)

b) $g^{-1}(x)$

c) Show that $ff(x) = 4x - 24$

Grade 7 (5 Marks)

Question 2

$f(x)=(x+2)^2$ $g(x)= 3(x-2)$

a) Show that $gf(x) = 3(x^2+4x+2)$

Given that $gf(x) = 2g^{-1}(x)$

b) Show that $9x^2 + 34x + 6 = 0$

Grade 8 (5 Marks)

Question 3

$f(x)=x^2$ $g(x)= 3x -1$

Find

a) $fg(2)$

$h(x) = gf(x)$

b) Solve $h^{-1}(x)= 3$

Grade 8 (5 Marks)

Congratulations. You have completed this topic.

Now go back to your revision planner and rate yourself out of 10.