

# OCR EXAM BOARD

GCSE Mathematics (9-1) J560

Foundation Tier: Papers 1, 2 & 3

Higher Tier: Papers 4, 5, & 6

## EXAM STRATEGY

2021-22



# What To Expect?

- The Exam comprises of 3 papers for both Foundation and Higher.
- **Papers 02 (F) and 05 (H) are Non-Calculator**
- Each paper is **90 minutes** (1hr 30minutes) long – some of you may be entitled to extra time!
- There will be questions covering all the topics in the OCR SoW



# How It's Graded

- Each paper is out of 100 marks.
- Total marks for all 3 papers is 300 marks.
- Available Grades for Foundation are: U – 5
- Available Grades for Higher are: 4 – 9 (anything below 4 will be a U)



## Time Management

You have 90 minutes for 100 marks.

If you are spending 3 minutes on a 1 mark question, there will be an easier method.

Likewise, if you spend 1 minute on a 6-marker, you've probably missed something.



# Key words and information

- Wordy questions can be daunting.
- Underline key information to help you pick out the things you need.
- Cross out any red herrings – for example, information in a table that you won't need.
- Tick each piece of information off as you use it so you don't miss anything out.



# Write neatly

- The easier you make it for the examiner to read your answers, the more marks you could obtain.
- Lay out each step of your working clearly and include units where necessary.
- Remember to show ALL working out if the question carries more than 1 mark



# Mathematical terms

- **Estimate** → This means work out roughly by rounding the numbers to one significant figure.
- **Explain** → Tell the examiner how you got your answer or how you know your answer is correct.
- **Construct** → This is another way of saying 'draw accurately' using mathematical equipment.



# Mathematical terms

- **Calculate** → This does not mean use a calculator, it means 'work out' (and show your working!) usually the answer is a number.
- **Complete** → This usually means to fill in a data table or to fill in gaps.





# Mathematical terms

Expand

$$4(d - 3) = 4d - 12$$

←  
Factorise

**Solve** → this means to work out the value of something; usually a variable in an algebraic equation.

**Simplify** → This is the process of making something simpler, eg. algebra or a fraction.



# Rounding

Make sure you read whether you need to round to decimal places or significant figures.

For example: 0.0453682

0.05      2 decimal places

0.045     2 significant figures

For example: 85762

85800      3 significant figures



# Units and Conversions

**Check:** are the units the same throughout the question?

**Check:** are the units given on the answer line?

**Remember:**

5 miles = 8 km

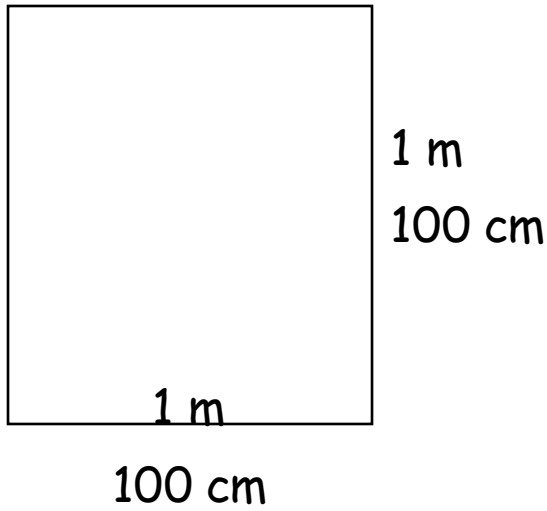
12 inches = 1 foot = 30 cm

60 minutes = 1 hour

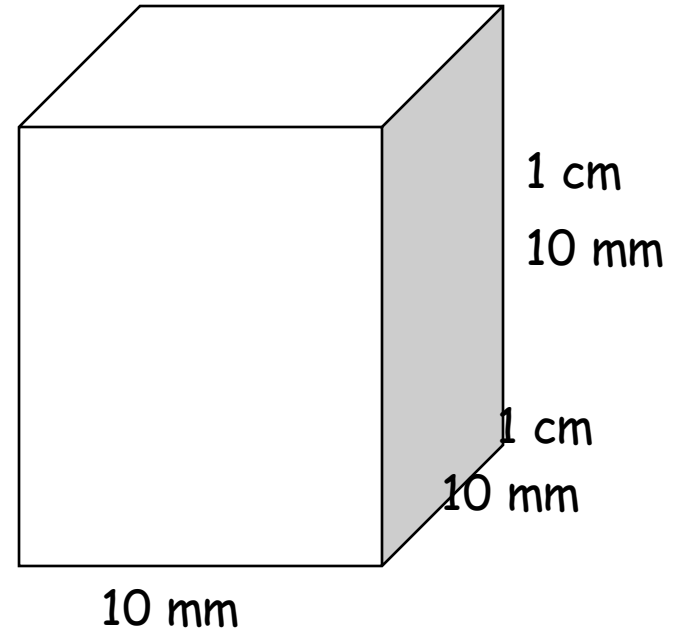
30 minutes = 0.5 hours, **NOT 0.3**



# Units and Conversions



$$1 \text{ m}^2 = 10\,000 \text{ cm}^2$$



$$1 \text{ cm}^3 = 1\,000 \text{ mm}^3$$



# “Give reasons for your answer”

Is it plural or singular? Use the marks available to interpret how many reasons to give.

**This does not mean write an essay!**

The examiner will be looking for keywords in your answer.

It might help to plan your answer briefly first to make sure you leave enough space for your reasons.



# “Diagram not drawn accurately”

Rulers and protractors will be of no use here.

You will need to use angle reasoning, area and volume formulae, trigonometry or circle theorems to help you answer these questions.



# Don't cross out your working!

...Unless you've got something better to replace it with. Crossed out working cannot be marked even if it is correct.

You are better off leaving incorrect working and gaining some marks than gaining none.

Why not have a go at that really hard question at the back? I bet you know some maths you can use for it.



# Check Your Working!

If you finish early...

Check your working.

Don't just sit looking at the wall.

This doesn't mean just look at your answers, go over every step of your working to make sure you haven't made any silly mistakes with times tables or negatives.





## AO2 and AO3

AO2 – Select and apply mathematical methods in a range of contexts

AO3 – Interpret and analyse problems and generate strategies to solve them

These are those problem solving questions you think you've done way to many of. Don't forget the skills you need to apply to them!



## Old Exam

Work out  $29 \times 52$

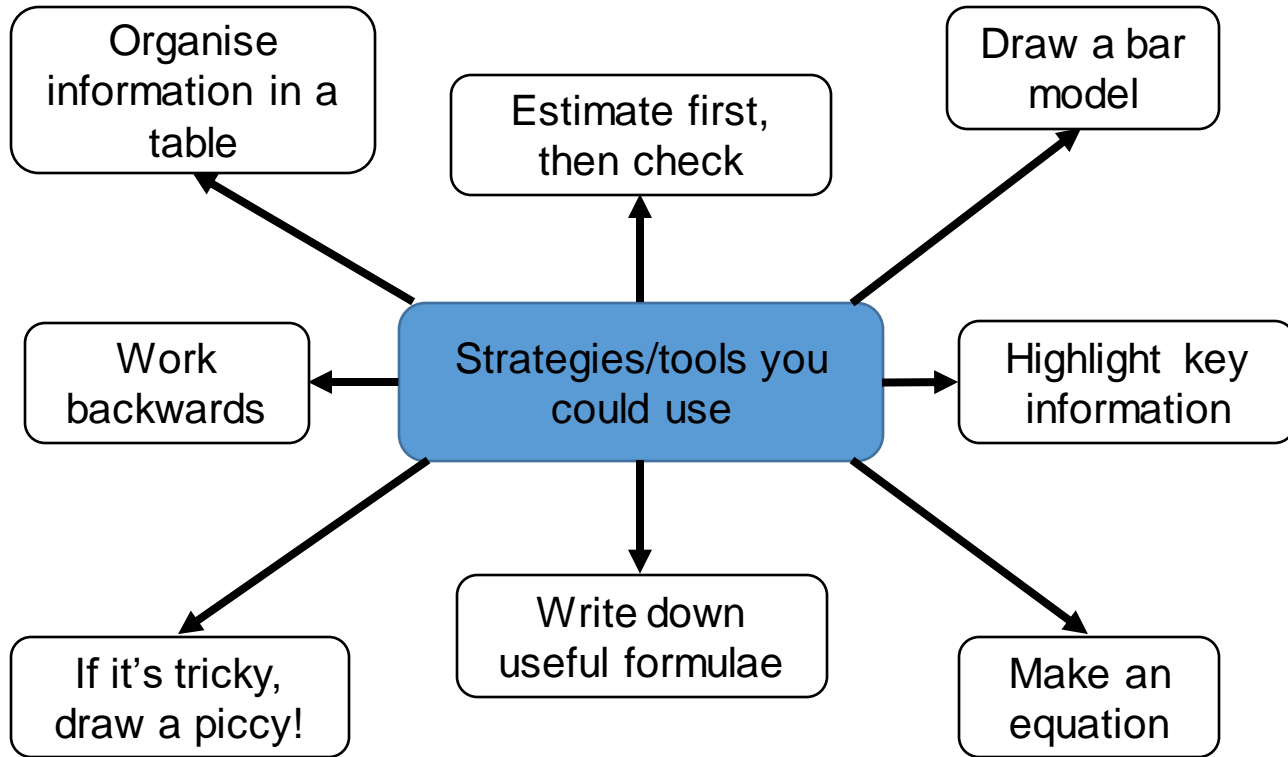
The mathematical skills haven't changed, YOU have to decide when is the right time to use them.

We all have a Mathematical Toolbox full skills that we have built up over the years. All we have to do is decide what is the correct tool to use for the job.

## New Exam

A local football club have just reached the county cup final. They want to bring 29 coaches to the final. Each coach has 52 seats. How many supporters are going to the final?





**Step 1**

Read the question highlighting key information.

**Step 2**

Plan and structure how you are going to answer it.

**Step 3**

Answer it showing all your mathematical working out.

