


# Computer Science

**Dear Parent/Guardian and Students**  
**Examination worries?**

**We've got it covered.....Read on for  
everything you need to know.**

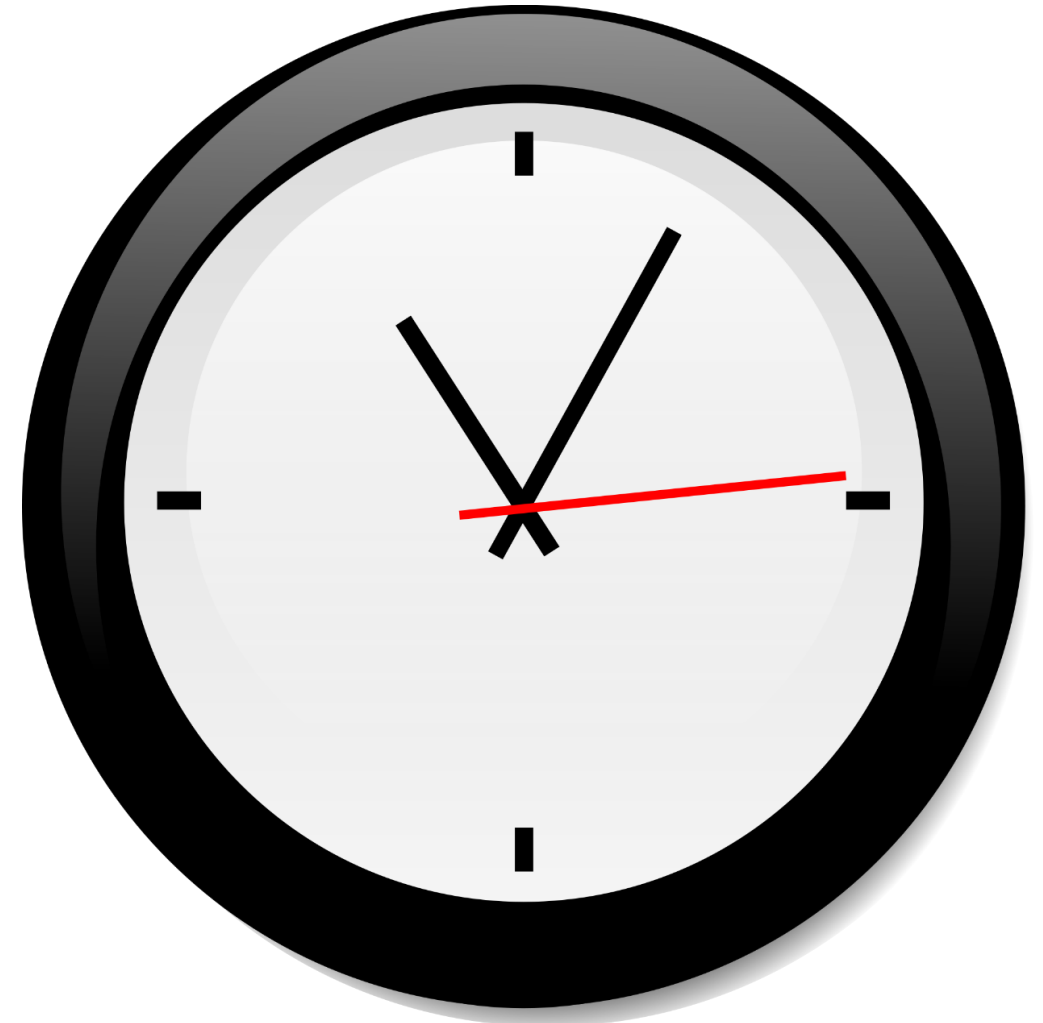
## PART 1: COMMAND WORDS



Understanding  
“command words”  
and how to use them to  
help you answer exam  
questions

## PART 1: COMMAND WORDS

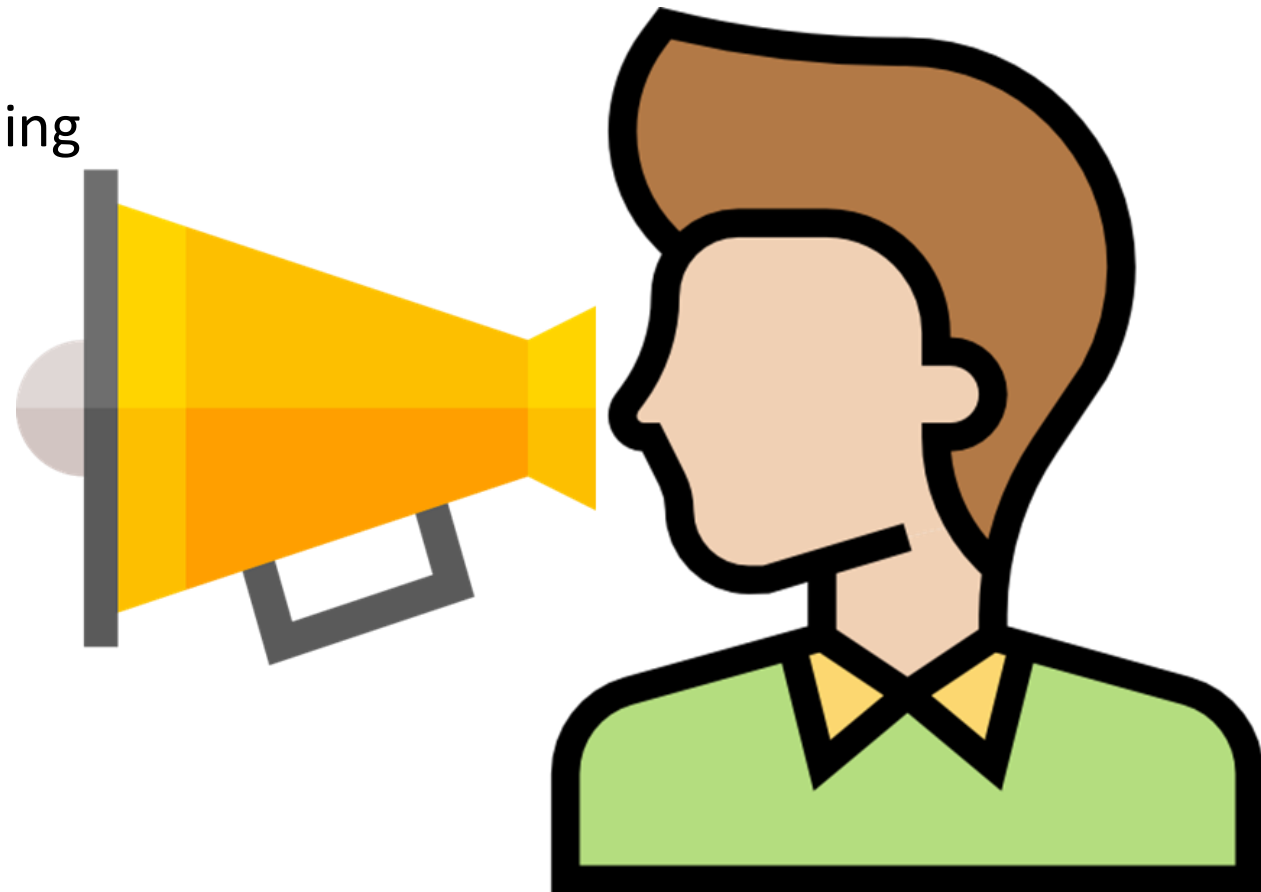
Put simply, understanding **exam technique** is not about **what** you know, but **how** you **apply** your knowledge under exam conditions.



## PART 1: COMMAND WORDS

Whilst **revision** is a vital part to getting good exam results, **examination technique** is also important.

Key to this is the importance of understanding “**Command Words**”.

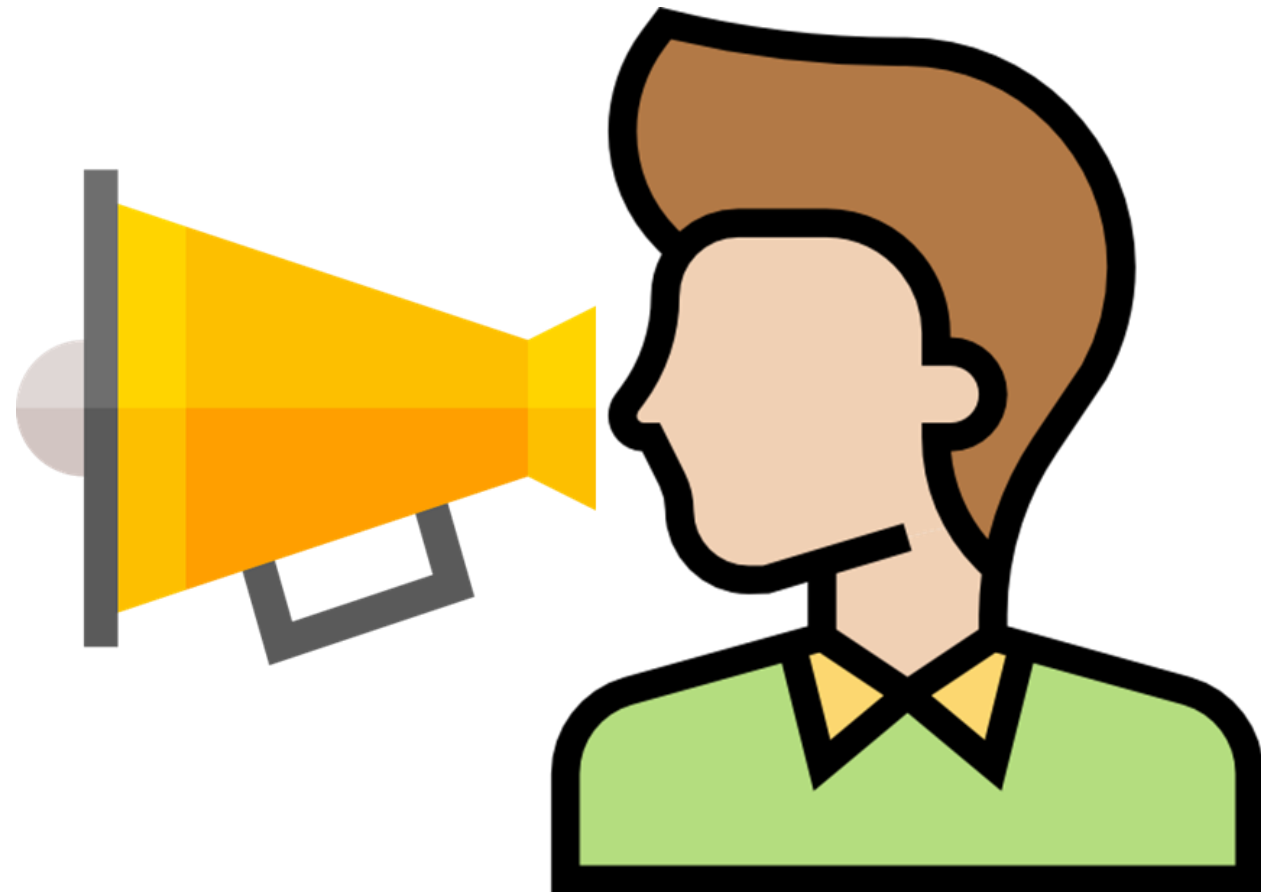


## PART 1: COMMAND WORDS

## What are command words?

**Command Words** are guides in the question which identify **how** the question should be answered.

They are carefully chosen to make it clear what the examiner is looking for and how they want the question answered.



## PART 1: COMMAND WORDS

It is important to **always read the whole question** and to understand what the question is getting at, as the command word on its own will need reinforcing with the remainder of the question.

**Top tip:** ALWAYS HIGHLIGHT THE  
COMMAND WORDS IN EACH QUESTION



## PART 1: COMMAND WORDS

Typical command words used in exam questions:

GCSE question grades: 1, 2, 3, 4

AS/A level question grades : E, D, C

Define

Name

Describe

Outline

Explain

State

Give

What is meant by

Identify

## PART 1: COMMAND WORDS

Typical command words used in exam questions:

GCSE question grades: 4, 5, 6, 7

AS/A level question grades : D, C, B

Apply

Demonstrate

Describe

Explain

Give

Give an example

Identify

Name

How

Show how

Using

Using examples

What would be the benefit / costs of

Which

Why



## PART 1: COMMAND WORDS

Typical command words used in exam questions:

GCSE question grades: 6, 7, 8, 9

AS/A level question grades : B, A, A\*

Advise

Analyse

Assess

Assess the relative

Importance

Compare & contrast

Consider

Critically assess

Discuss

Evaluate

Explain

Explain why

Identify

Justify

Organise

Show how

What

What factors

Which

Why

## PART 1: COMMAND WORDS

What did you notice about the words in the lists?

Certain words appeared in more than one category.

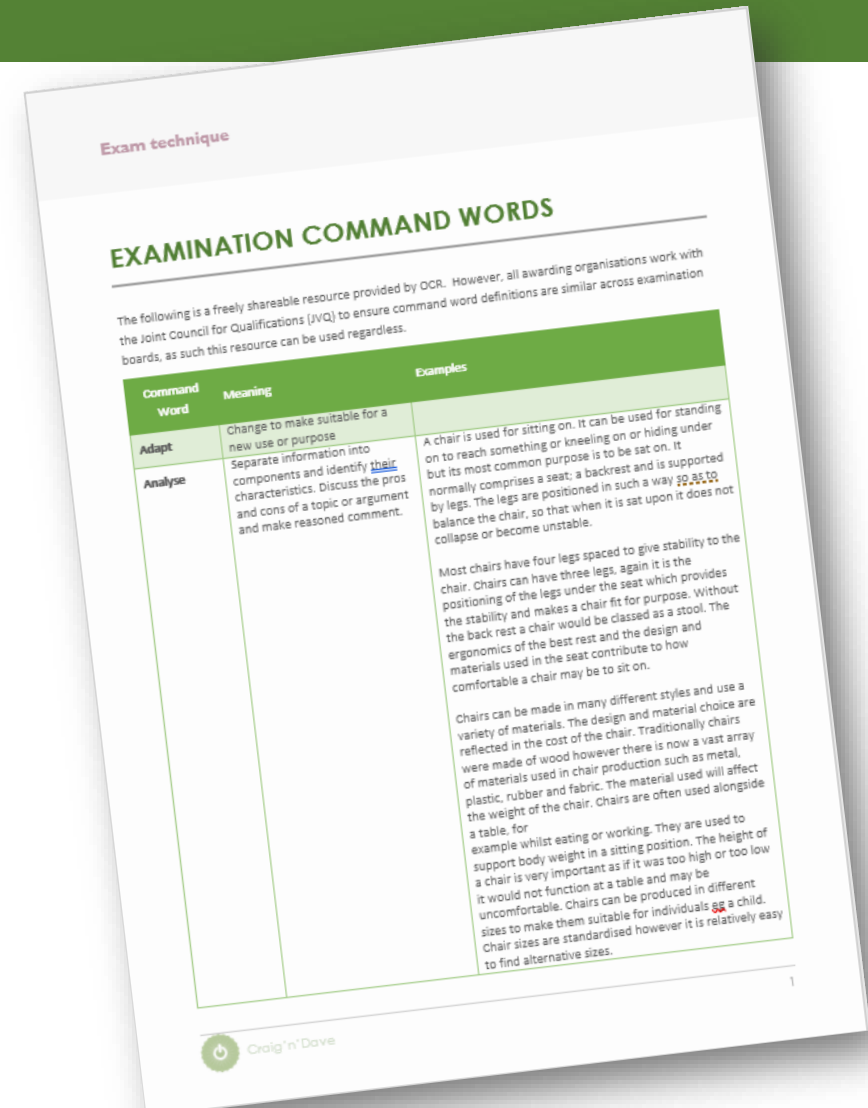
This is where the **rest of the question is important** in giving you the full picture of what is required



## PART 1: COMMAND WORDS

Make sure you understand what the **commands words** are asking you to do:

- Do not **explain** if you are being told just to **identify**
- Do not simply **identify** if you are being asked to **explain**
- Do not just **explain** if you are being asked to **analyse**!



## PART 2: EXAM GUIDANCE

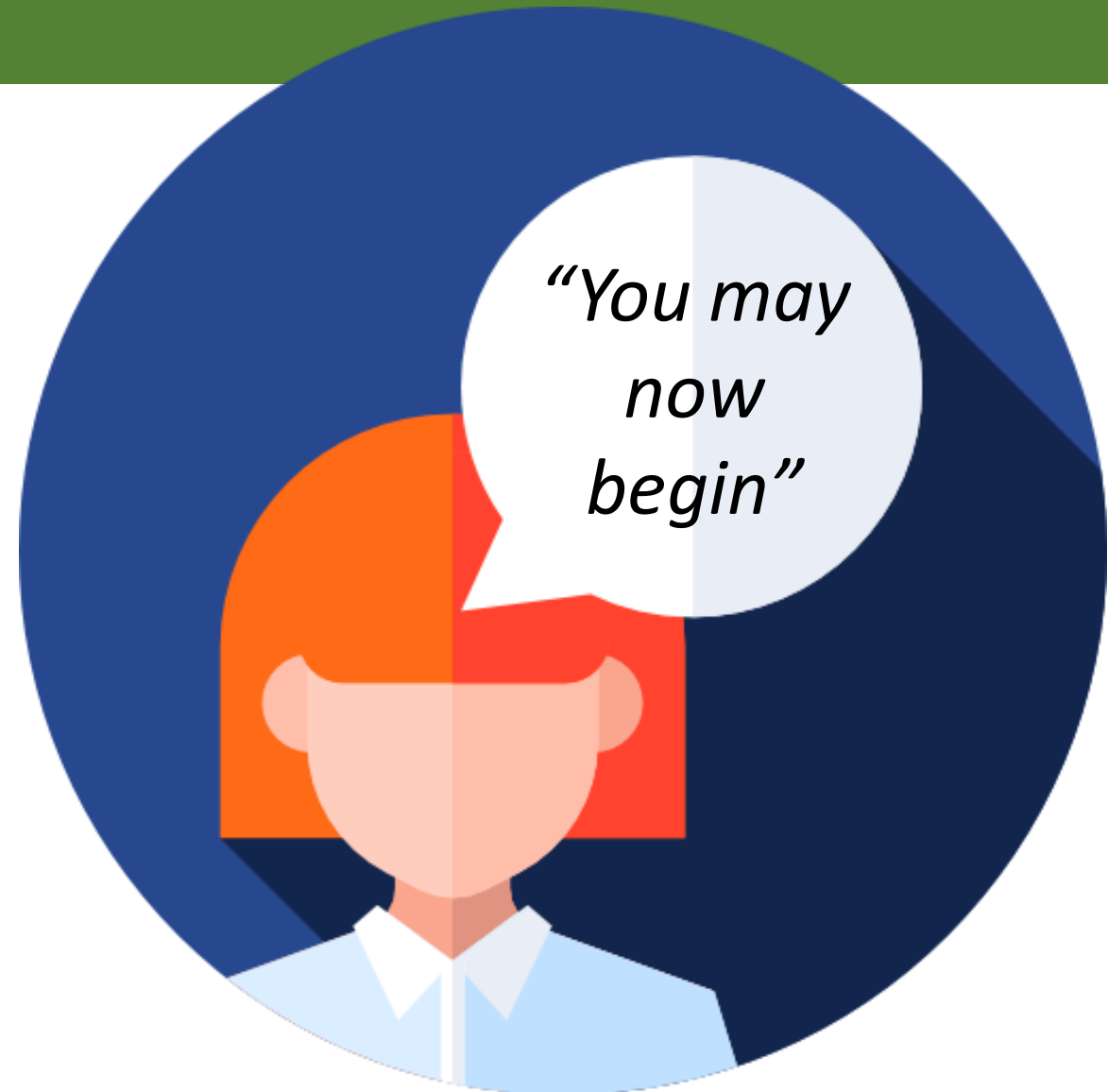


Guidance for the  
actual exam

## PART 2: EXAM GUIDANCE

When you hear those magic words “You may now begin”:

- **Avoid** the temptation to rush in.
- Adopt a **calm**, methodical approach.
- **Read** the instructions **carefully**
- Make sure you **understand** what you have to do.



## PART 2: EXAM GUIDANCE

Spend the right amount of time on each question:

- The GCSE exams are **80** marks and **90** minutes long.
- The AS exams are **70** marks and is **75** minutes long.
- The A Level exam is **140** marks and is **150** minutes long.
- Therefore as a rough guide you should look to spend **1** minute on each question per mark.

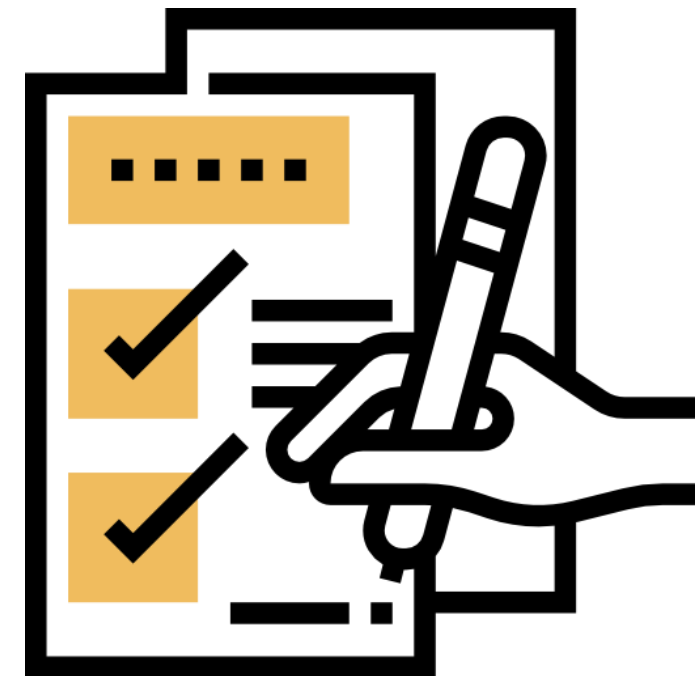
2 Steve allows his audience members to request songs that they want to hear. He provides his audience with a form, on paper, on which requests can be made.

(a) What **type** of application software would be **most** suitable to use to create this form?

..... [1]

## PART 2: EXAM GUIDANCE

- Look for the questions that relate to those parts of the course you have revised the most.
- **Read the question carefully** before you attempt to answer it.
  - What **exactly** is it asking?
  - Does the question have more than one part?
  - Make sure to **underline or highlight** key words.  
(look for those **command** words)
- Having done all this, is the question about what you think it is?
- Make sure to **relate** your answer to the scenario.



## PART 2: EXAM GUIDANCE

- If your mind goes blank **DON'T PANIC!**
- If you have a plan you're less likely to go blank in the middle of a question.
- If this happens go on to the next question and come back later to the one you were tackling.





## PART 3: EXAM PAPER TIPS

1. State two pieces of utility software a secondary school would need to install on its computer systems. For each piece of software justify why it would be needed. **[6]**

Utility software 1:

Justification:

Utility software 2:

Justification:

2. One of the stages of code generation by a compiler is optimisation. Describe what optimisation does. **[2]**
3. Explain why interpreters are used in a computer system. **[2]**
4. Interpreters and Compilers are both examples of Translators. Explain one way in which they are similar and one way in which they differ. **[4]**

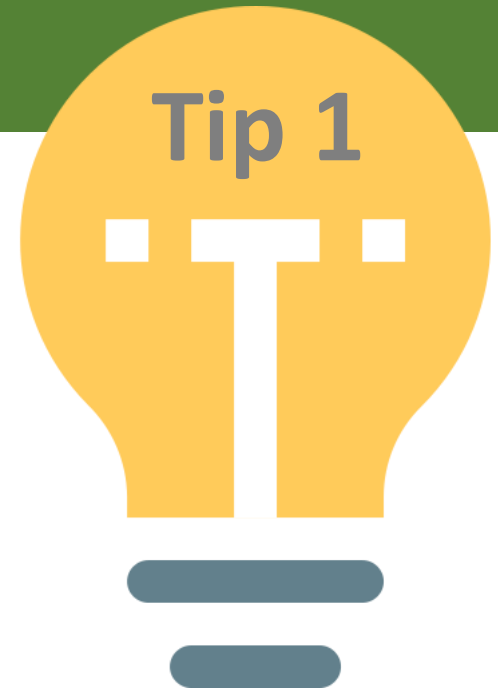
# Exam paper tips

## PART 3: EXAM PAPER TIPS

Your exam papers are **scanned** before being marked online by examiners. Therefore make sure to keep your answers written on the **lines provided** only.

If you can't do this (maybe because you have crossed out an answer) then:

- In the first instance use the **continuation pages** provided at the back of the exam paper.
- If you can't do this write your answer in **any other space provided** and note to the examiner on the lines where to find the answer. Even if it looks obvious!



Answer on  
bottom of  
page 4

## PART 3: EXAM PAPER TIPS

~~Don't scribble out wrong answers~~

**Don't scribble out answers you think you got wrong.**

~~Simply cross out the answer neatly so it is still readable.~~

Examiners can award you marks for crossed out answers if it's correct and the only one there.

So scribbling it out could end up costing you marks.



## PART 3: EXAM PAPER TIPS

It might sound obvious but...

**Make sure your handwriting is readable!**

Examiners will try hard to read your answers, but if they are unable to they can't award you marks.

Your handwriting can accidentally get very scruffy when you are under stress. Pay extra attention to carefully form letters.



## PART 3: EXAM PAPER TIPS

Computing exams aren't English exams.

Examiners don't really want to have to hunt for marks within rambling paragraphs.

**Bullet points** are the best way of presenting your answers unless the quality of your written answer is specifically stated as being assessed.

Use a **new** bullet for **each new point** you are making, it will help to keep you focused.

Put each bullet point **on a new line**.

## Tip 4



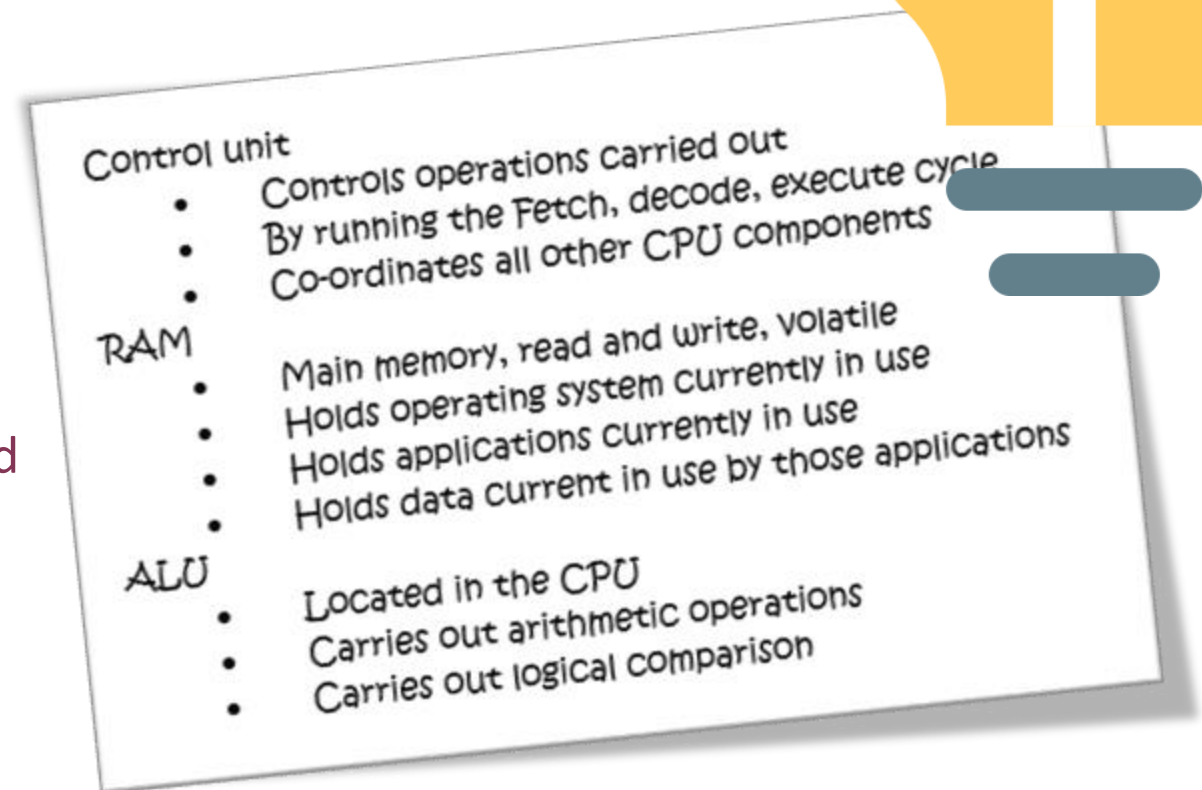
## PART 3: EXAM PAPER TIPS

In order to use the bullet point method make **headings** out of the main parts of the question and then **list your points** under those headings to answer the question.

So if question asked you to...

Explain the purpose of the Control unit, RAM and the ALU [6]

...you could do this:



## PART 3: EXAM PAPER TIPS

Try not to use words that are in the question.

So if a question said:

State the purpose of the arithmetic logic unit.

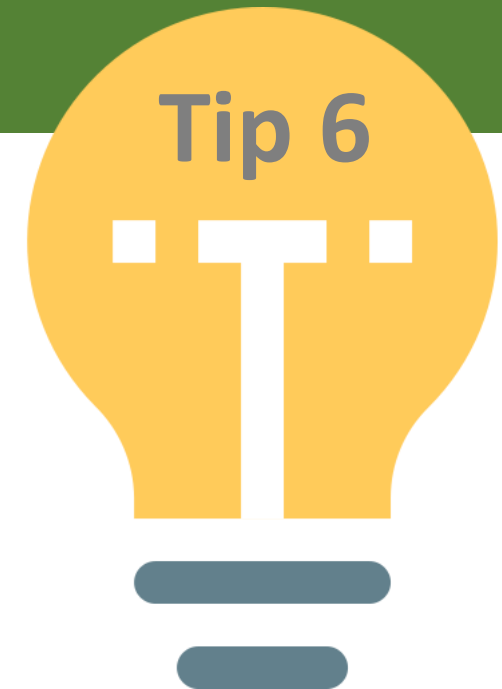
Don't then write:

It's a unit for arithmetic and logic.

You won't get marks.

Instead you should write:

- Performs addition. E.g.  $x = x + 1$
- Evaluates conditions. E.g. If  $x > 6$
- Performs binary shifts.



## PART 3: EXAM PAPER TIPS

Most questions are presented as part of a **scenario**.

Make sure your answer and examples are **related to that scenario**.

You won't get marks for generic points not related to the scenario.



## Tip 7





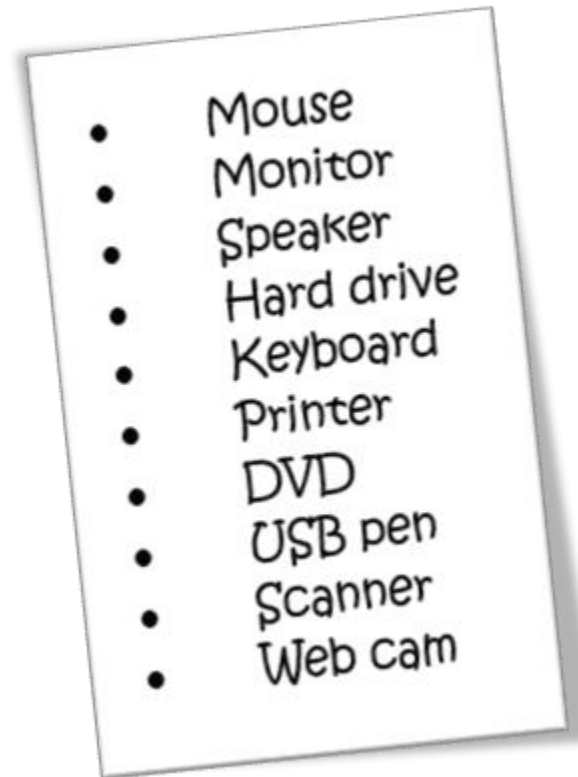
## PART 3: EXAM PAPER TIPS

You **can't** simply write down everything you know on a topic in response to a question in hope of getting the marks.

This is called a '**shopping list**'

E.g.

List two input devices. [2]

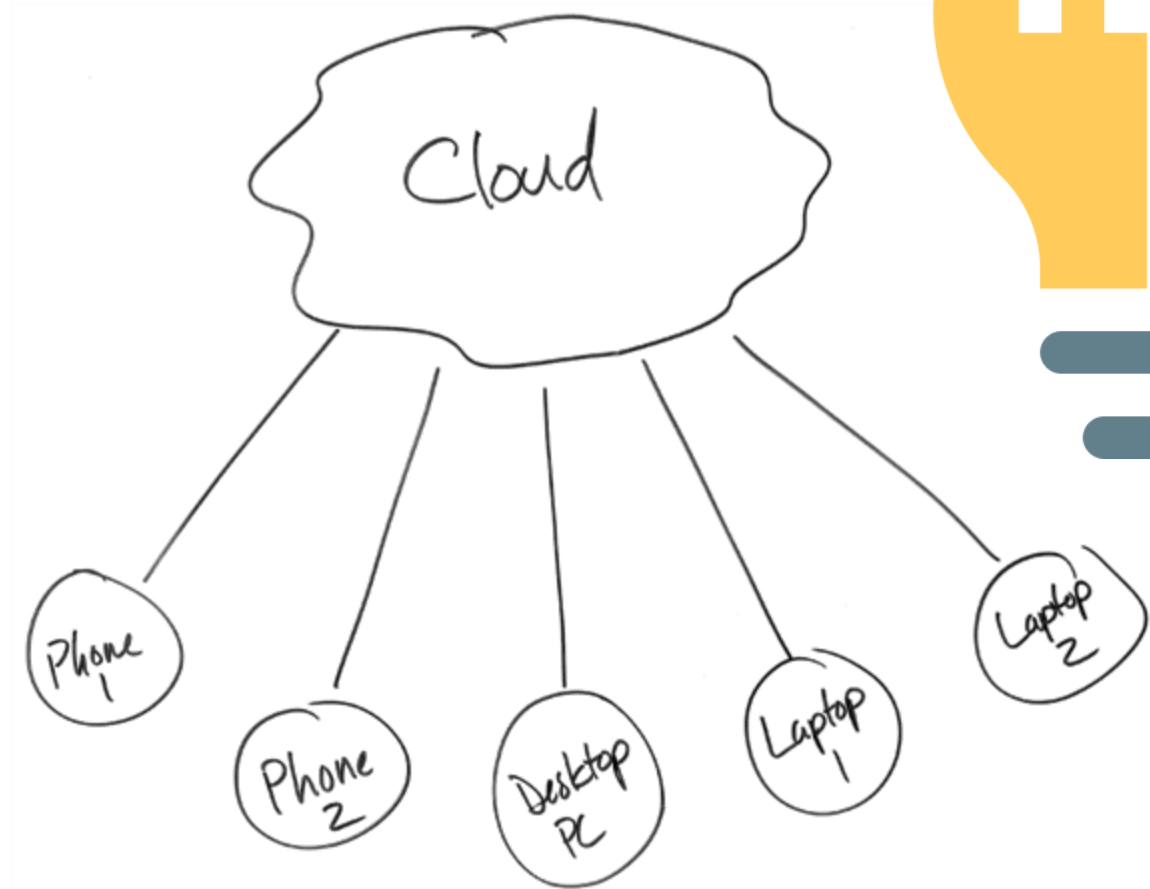


- The question is only worth 2 marks.
- At least 2 input devices have been listed.
- However there are also output and storage devices listed.
- This shows a lack of understanding.

## PART 3: EXAM PAPER TIPS

Don't be afraid to use a **diagram** instead of **text** to help explain a concept if you feel it is relevant and you can make all the points you need to gain the marks.

Annotated diagrams can be an excellent way to show your understanding.



## Tip 9



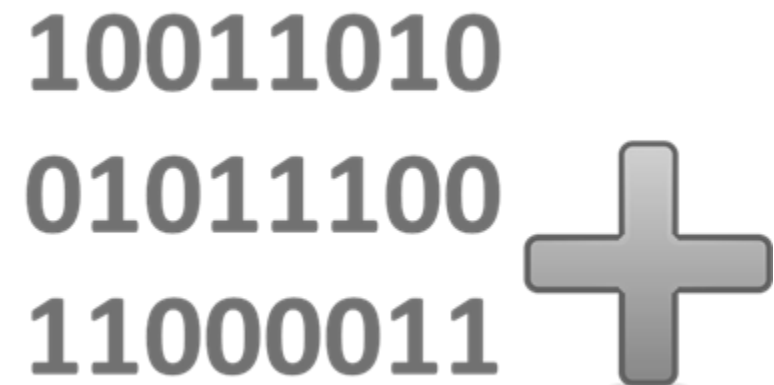
## PART 3: EXAM PAPER TIPS

If a question has multiple sub parts marked like this **i) ii) iii)** then you are allowed **follow-through**.

This means that **part ii)** will need information from **part i)**

You might get the answer to **part i)** incorrect, as long as the method you use in **part ii)** is correct you will get the marks for using the incorrect answers from **part i)** in your answer.

This is common in binary based arithmetic questions.



## PART 3: EXAM PAPER TIPS

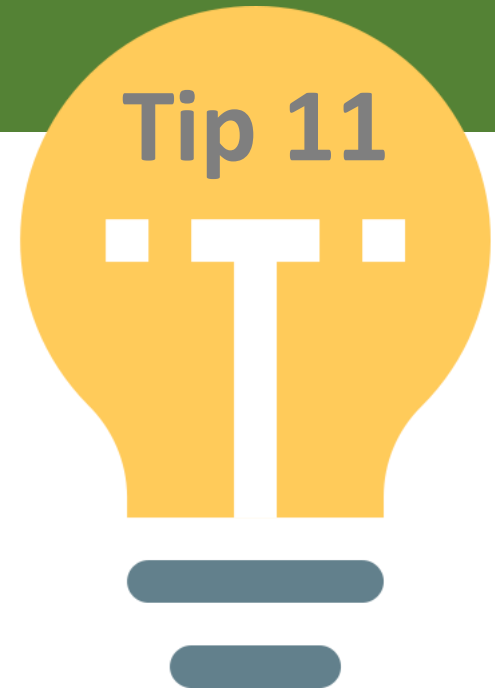
Include **examples** in your answer that are **relevant to the question and scenario**.

They demonstrate your understanding.

Examples are often worth an additional mark.

Describe a situation that can cause the processor to stop execution of a current task. [2]

When an interrupt is received on the control bus from another device.  
E.g. when a file has finished being transferred to RAM.



## PART 3: EXAM PAPER TIPS

**Don't repeat the question** in your answer.

You are using up valuable time and space for words that will not gain marks.

State one characteristic of random access memory. [1]

One characteristic of random access memory is that it is volatile.

Tip 12



## PART 4: TACKLING EXTENDED QUESTIONS



How to tackle those  
8+ mark questions

### PART 3: EXAM PAPER TIPS

Most exam papers will have extended answer questions worth 8 or more marks.

Don't get thrown by these questions, they are designed to test higher understanding and to provide you with an opportunity to really demonstrate your knowledge.

In at least one extended question in each paper the quality of your written communication (spelling, punctuation, grammar & technical terms ) will be assessed, these questions are clearly marked.

- OCR mark these questions with an asterisk. (\*)
- AQA state it clearly in the question.

## PART 3: EXAM PAPER TIPS

**Step 1:** Highlight the command words

1. The Internet has had a major effect on society.  
**Discuss** the social and ethical effects on young people of allowing unrestricted access to The Internet. [8]
- .....
- .....
- .....

Make sure you know what the **command words** mean.

**Command words** are guides in the question which identify **how** the question should be answered.

**Discuss** means: “Give an account that addresses a range of ideas and arguments.”

**STEP 1: Highlight the command words**

STEP 2: Highlight other parts which are important

STEP 3: Identify the scenario

STEP 4: Split the question into multiple parts



## PART 3: EXAM PAPER TIPS

**Step 2:** Highlight other important words

1. The Internet has had a major effect on society.

**Discuss** the social and ethical **effects on young people** of allowing **unrestricted access** to The Internet. [8]

.....

.....

.....

The question is asking you to talk about the “**effects**” on **young people**  
So make sure to talk about this.

However, **check** carefully, it is **not** that simple, you could still get side-tracked if your answer just becomes about the **effects of The Internet on young people**.

This question is asking you to be more specific, you must isolate your answers to talking about the **effects unrestricted access to The Internet has had on young people**.

STEP 1: Highlight the command words

**STEP 2: Highlight other important words**

STEP 3: Identify the scenario

STEP 4: Split the question into multiple parts

## PART 3: EXAM PAPER TIPS

**Step 3: Identify the scenario**

1. The Internet has had a major effect on society.  
Discuss the social and ethical effects on young people of allowing unrestricted access to The Internet. [8]

---

---

---

Don't forget that your arguments and examples must directly relate to the scenario you are given and not just everything you know about a topic.

STEP 1: Highlight the command words  
STEP 2: Highlight other parts which are important  
**STEP 3: Identify the scenario**  
STEP 4: Split the question into multiple parts

## PART 3: EXAM PAPER TIPS

**Step 4:** Split the question into multiple parts

1. The Internet has had a major effect on society.  
Discuss the **social** and **ethical** effects on young people of allowing unrestricted access to The Internet. [8]
- .....
- .....
- .....

There are actually two questions here:

- A discussion of the **social** effects
- A discussion of the **ethical** effects

The examiner will expect you to **divide** your response equally between these two parts, so you **can't** focus too heavily on one over the other. This has now become **two** slightly less daunting four-mark questions instead of one eight-mark one.

STEP 1: Highlight the command words

STEP 2: Highlight other parts which are important

STEP 3: Identify the scenario

**STEP 4: Split the question into multiple parts**

## PART 3: EXAM PAPER TIPS

This four-step process in reality will only take you a minute and will be well worth it in order to make sure you keep your answer focused and on track. So what have we ended up with?

The Internet has had a major effect on society  
Discuss the social and ethical effects on young people of allowing unrestricted access to The Internet. [8]

In our head we should now be seeing the following two questions:

1. Give an account that addresses a range of ideas and arguments on the social effects on young people having unrestricted access to The Internet. [4]
2. Give an account that addresses a range of ideas and arguments on the ethical effects on young people having unrestricted access to The Internet. [4]

This is the same question as was presented in the exam paper, however now it is much easier to tackle, you are more likely to keep on point and to make sure you answer all aspects of the question.

### PART 3: EXAM PAPER TIPS

We can even take this one step further. Notice how each question asks you for the “effects”.

Effects come in two forms, **Positive** and **Negative**.

So we now we have 4 two-mark questions instead of one eight-mark one.

The Internet has had a major effect on society

Discuss the social and ethical effects on young people of allowing unrestricted access to The Internet. [8]

1. Give an account that addresses a range of ideas and arguments on the **positive social** effects on young people having unrestricted access to The Internet. [2]
2. Give an account that addresses a range of ideas and arguments on the **negative social** effects on young people having unrestricted access to The Internet. [2]
3. Give an account that addresses a range of ideas and arguments on the **positive ethical** effects on young people having unrestricted access to The Internet. [2]
4. Give an account that addresses a range of ideas and arguments on the **negative ethical** effects on young people having unrestricted access to The Internet. [2]

## PART 3: EXAM PAPER TIPS

The Internet has had a major effect on society  
Discuss the social and ethical effects on young people of  
allowing unrestricted access to The Internet. [8]

You can create a writing frame to make it easier to answer all  
parts of the question.

This will really help show the examiner you have understood the  
question and make it easier to mark!

It will help you focus and stay on point.

*Positive Social Effects:*

*Negative Social Effects:*

*Positive Ethical Effects:*

*Negative Ethical Effects:*

## PART 3: EXAM PAPER TIPS

The Internet has had a major effect on society. Discuss the social and ethical effects on young people of allowing unrestricted access to The Internet. [8]

Each of these are **two-mark** questions.

So make sure to make at least **two** valid points under each heading.

Again, it is ok to use bullet points to help spilt out your points. You don't have to write in paragraphs.

However remember that some of these questions are marked on the quality of your **written communication**.

Make sure to write in full sentences, and check that spelling and grammar!

*Positive Social Effects:*

- First positive social effect on young people

- Second positive social effect on young people

*Negative Social Effects:*

- First negative social effect on young people

- Second negative social effect on young people

*Positive Ethical Effects:*

- First positive ethical effect on young people

- Second positive ethical effect on young people

*Negative Ethical Effects:*

- First negative ethical effect on young people

- Second negative ethical effect on young people

## PART 3: EXAM PAPER TIPS

And finally! **Don't panic** when you see these extended questions. Be confident:

- Take your time to **break the question down**.
- Make a **writing frame**.
- Address all the important **key words** in the question.
- Use subject specific **terminology**.
- Use **examples** related to the scenario.
- Be **concise**, don't repeat the question.
- Check your **spelling, punctuation** and **grammar**.
- Make sure your handwriting is easy to read!

