Viva Exam – Year 7 Science

Your **Viva exam** supports you in developing your confidence, self-expression and curricular understanding.

It does so by improving your **oracy**.

When a University student writes a thesis (their final paper or exam), they have to defend what they have written whilst their Professors ask questions. This is often referred to as a **Viva exam**.

Viva is short for **Viva Voce,** this is the Latin for **'with living voice'**, or in other words **spoken** not written.

Across this Half Term you will prepare for a **Viva exam** on the curricular area we are studying, this will be **instead** of your End of Term exam.

Your teacher will support you in **preparing** by **suggesting** what you may speak about, **providing** materials to support you, **checking** in on your planning and progress and giving you **feedback** after you have spoken so that you know what you have done well and what you will need to improve, next time.

This pack contains the basic materials and guidance you will need, to prepare for your **Viva exam**.

'Viva' Exam – Science – Yr 7 – HT4
Student Name:
Expectations: -To speak unaided and without interruption on the subject of 'Separation techniques' for two minutes. -To accept and respond to two unknown questions following your speech and within this two-minute period.
Resources Permitted: -Cue card notes are permitted, however, higher marks will be received for speaking without aides.

Marking and Grading:

As with your End of Term, your Viva will be given a 0-9 grade, students should always aim to meet or exceed their target grade. However, there is no need to feel bad if you don't, all this means is that you are learning and making progress!

Your total marks will be multiplied by five to produce a percentage, just like you get in your other End of Term exams, the teacher will then convert this percentage so that your termly report can show a grade in this area.

Viva exams are marked in four categories, please see the mark scheme below:

Preparation **Mark:**	**Level 3 – Award 4-5 Marks** Complete and exemplary evidence of written preparation.
	Level 2 – Award 2-4 Marks Purposeful but incomplete evidence of written preparation.
	Level 1 – Award 0-2 Marks Limited or no written evidence of preparation.
Timing and Content **Mark:**	**Level 3 – Award 4-5 Marks** Speaks for the full allocated time, without pause or interruption. Speaks exclusively on the subject selected, is precise, concise and purposeful. Speaks without the use of any written or visual aids.
	Level 2 – Award 2-4 Marks Speaks for more than half of the allocated time, with limited pause or interruption. Speaks exclusively on the subject selected, but lacks precision and focus at times.
	Level 1 – Award 0-2 Marks Speaks for less than half of the allocated time and or fails to focus on the subject and lacks purpose.
Manner and Presentation **Mark:**	**Level 3 – Award 4-5 Marks** Projects and modulates consistently, uses rhetorical skill, body language and positioning throughout and with exemplary effect.
	Level 2– Award 2-4 Marks Projects well but modulates and uses body language inconsistently, increasing evidence of rhetorical skill.
	Level 1 – Award 0-2 Marks Fails to project or modulate voice, use of body language is limited, rhetorical skill is largely unevidenced.
Response to questioning **Mark:**	**Level 3 – Award 4-5 Marks** Responds convincingly and thoughtfully to both questions, in line with the Level 3 criteria for Timing and Content and Manner and Presentation.
	Level 2 – Award 2-4 Marks Responds convincingly to elements of both questions or to just one question but not the other.
	Level 1 – Award 0-2 Marks Is unable to respond at all or convincingly enough, to either question.

Overview:

During this Viva you will need to plan and prepare to speak on one of the separating techniques you have learned about in Science. You will also need to answer two questions (which you won't know in advance) from the audience, in other words, your peers and teacher.

1. **Stage 1 – Decide which separating technique you will speak on.**
2. **Stage 2 – Plan your speech and condense this plan into notes.**
3. **Stage 3 – Practice your speech, learn to do it without notes and with greater confidence.**
4. **Stage 4 – Share your speech with parents, peers and your teacher, for feedback.**
5. **Stage 5 – Deliver your speech to the class and your teacher.**

Stage 1

When deciding on the subject of your speech you should:

- Include and explanation of your chosen separation technique ang outline how it works
- Give names and examples of different mixtures and compounds that can be separated by your chosen method
- Explain why these substances can be separated using this method using your knowledge of properties of substances
- Check that you're confident in your existing knowledge and willing to build on it.

Stage 2

When planning your speech you should consider:

- Create a clear structure with an introduction, main points and conclusion.
- Choose at least one example of a mixture that cab be separated by your chosen separation technique
- Consider the properties of the mixture which makes your chosen separating technique suitable
- Describe the equipment needed and the process of you separation technique.
- At this stage, you will map out the flow of your speech. You should plan how to open with a hook, organise your key ideas on separating mixtures and draw a clear conclusion. Think about rhetorical techniques like repetition, rhetorical questions, or analogy to persuade your audience.

Stage 3

When practicing your speech you should:

- Practice repeatedly those parts you are weakest in, do not waste time practicing again and again, what you already know.
- Watch and listen to yourself, for instance speak out loud, practice with parents, guardians or peers, use a mirror, record yourself, you will need to be comfortable with the sound of your own voice and the value your opinion carries.
- Focus on pace, rhythm, modulation and tone, as much as the content of your speaking, become comfortable pausing throughout your speech, rather than saying 'um'.
- Keep it within the two-minute time limit.

Stage 4

When sharing your speech you should consider:

- What are the initial reactions of others, do they seem more interested in some parts of the speech that others?
- What questions are people asking you afterwards, could these be questions that are likely to be asked of you on the day?
- What feedback does your audience give you on the use of your voice, your body language and communication style, are you confident and present enough?

Stage 5

When delivering your speech you should:

- Have notes with you in case you get stuck but attempt to go by memory as much as possible.
- Position yourself in the room, standing, at the front, use the space and consider walking around it as you speak.
- Focus on the faces of your audience, look for signs as to whether they are engaged or excited, consider whether you need to modulate your tone, increase volume, or lean move heavily on a rhetorical device.
- During the final stage, focus on being calm, confident and engaging. You may use brief notes but rely on memory as much as you can. Make eye contact, speak clearly, and try to connect with your audience. Once your speech ends, be prepared to answer one unseen question from your teacher, using what you know from class.

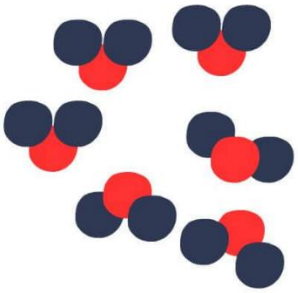
Mixture

-No chemical bond hold individual constituents together

-No new substances are formed

-**Examples:** Salt in water, Sulphur in iron fillings, oil and water, pasta and sauce, smoke and fog, etc

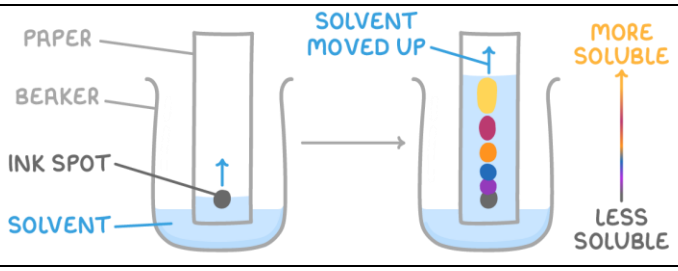
Compound

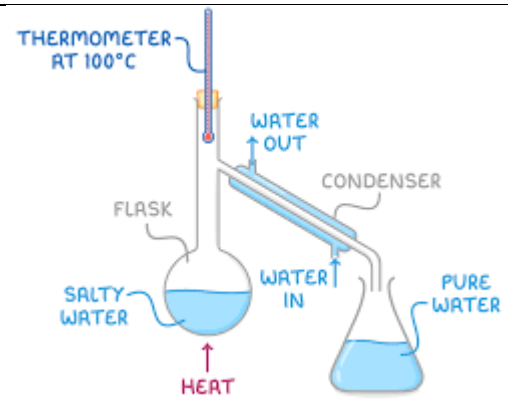
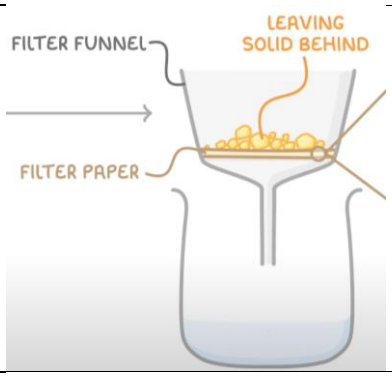
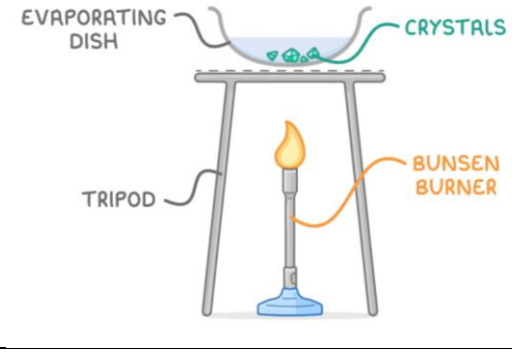


-Chemical bonds hold individual constituents together

-New substance (s) is formed during formation

-**Examples:** water, sodium chloride (NaCl), baking soda, sodium bicarbonate (NaHCO3), Hydrochloric acid, etc

Separating Techniques	Equipment set-up
Chromatography	

Distillation	
Filtration	
Evaporation/ Crystallisation	

Useful resources:

www.kerboodle.co.uk

Solutions and Separations - BBC Bitesize

Separation techniques KS3 | Y7 Science Lesson Resources | Oak National Academy

Useful videos:

GCSE Chemistry - Separation Techniques - Filtration | Evaporation | Crystallisation - YouTube

How To Separate Solutions, Mixtures & Emulsions | Chemical Tests | Chemistry | FuseSchool