- **Discussion on Teams reviewing initial content and timing**

colleague

applicant

[redacted] 28/03 7:55 pm

2

Term 2 2021 - Biological Sciences

Dear 08 Science

Please find a link to a planner for Term 2. Would it be possible to discuss this on Tuesday during our PL time?

Calendar Term 2 2021.docx
MSM Science Learning Area > 08 Science

Collapse all

colleague

[redacted] 28/03 7:57 pm

1

It has 22 lessons as a rough guide. There are 3 revision lessons planned before the exam block.

colleague

[redacted] 28/03 8:12 pm

Thanks [redacted] - I will have a look at this before Tuesday afternoon

applicant

[redacted] 29/03 8:12 am

Yes, keen to discuss this Tuesday afternoon [redacted] thanks!

colleague

[redacted] 31/03 8:22 am

2

I have looked at some previous exams and have put some things together. It is largely the 2020 exam with some extra content on cells. For your consideration, it is linked below.

2021 8 Biology Exam.docx
[redacted]cience Learning Area > 08 Science

colleague

[redacted] 31/03 8:31 am

We will need a specific lesson on microscope calculations using the Field of View. I have found these resources and put them all in one document - they might be useful.

Microscope and FOVs.docx
[redacted]Science Learning Area > 08 Science

applicant

[redacted] 31/03 8:37 am

Thanks [redacted] - I'll take a look at this today. My initial feeling is that there is a lot of content to be covered - two types of cells, four body systems, and two reproductive systems and if you want to go into the details of the menstrual cycle and pregnancy...well, its a lot of work for the students to recall in a 7 week timeframe.

colleague

[redacted] 31/03 8:42 am

Don't forget microscope skills (I think there is a need for a cell-based SIS question in the exam). I recognise that this is a lot, and would greatly appreciate any suggestions to make it more reasonable for teaching and learning. Having not taught Year 8 for a while, I am unsure of the time that is needed for some of these topics.

applicant

[redacted] 31/03 8:58 am

The students absolutely love these topics and there is a high level of engagement and questioning in class as well! Maybe we could assess cells and body systems, but not the reproduction? Anyway, my Year 10s are busy watching a video right now so I don't expect a peep out of them for 30mins so I'll drink my coffee and have a think

colleague

[redacted] 31/03 9:00 am

I think we've discussed this before... but in the past has this topic gone across a term and a half???
Is it possible to put Repro into Term 3 & then only have assessment on cells & body systems for Term 2 exam.
Not assess Repro (maybe only formally if we felt the need) and then just continue with Multimodal for Earth/Space for the remainder of Term 3????

2.3 – support planning using understanding of curriculum and assessment and reporting requirements

- **Review and planning of the unit with Curriculum Leader**

applicant

From [redacted]
Sent: Wednesday, 31 March 2021 1:05 PM
To: [redacted] colleague
Subject: Year 8

3.6 – review using knowledge of curriculum

Dear [redacted] colleague

Attached is what I think could be possible for Year 8 to fit cells, body systems and reproduction into one term.

Basically I have condensed some of the lessons on microscopes and tried to give at least two lessons to learning the major body systems. In Biology our mantra for a lot of this material is "structure relates to function", so while learning the names of the various structures is necessary for using correct scientific vocabulary, it is the link between the structure and the function that takes the time in teaching.

Reproduction would then have to be vastly simplified to fit into about five lessons. I think about three weeks used to be spent on reproduction, its up to you if you think a longer or shorter time frame is necessary here. A shorter version gives students an overview but detail is much reduced.

We also used to show them the "Raging teens" and "An everyday miracle" documentaries, these are not included in a shorter version of reproduction, but could be optional extras depending on what the "exam block" looks like for Year 8 (docos need parental permission though).

3.6 – review using knowledge of workplace practices

This would leave a whole term for Earth Sciences. If you are interested in having a full term on Earth Science and are open to introducing Year 8 to an extended writing/research task and responding to a claim, rather the long running multi-modal task on the rock cycle, then I have attached an assessment document that my son did last year about e-waste and mining (also links to teaching sustainability). Thought I would throw it to you for thought.

These are just my ideas and I am absolutely easy going on what you decide.

2.3 – support planning using understanding of curriculum and assessment

Regards
[redacted] applicant

[redacted] applicant
Classroom Teacher

From: [redacted] colleague
Sent: Wednesday, 31 March 2021 3:11 PM
To: [redacted] applicant
Subject: RE: Year 8

Responsibility for supporting the teaching team

applicant
Thank you [redacted] for your attention to this. I hope you don't mind that I have suggested you be the lead for Year 8 this term.

Last year, Year 8's may have watched a couple of doco's on puberty and birth (see the BBC Raging Teens and An everyday Miracle, both of which are 50ish minutes long). Did you teach Year 8 last year? Do you think they are necessary? Maybe sexuality, puberty, consent (etc) needs to be in PosEd.

The Year 8 Earth task you shared is quite a rigorous task. As a teacher, I think it is out of scope a bit, particularly with the word limit, and the guiding questions. The standard for the Earth Sciences is "comparison and explanation of rock processes" rather than a more complex cognition like analyse or evaluate. It definitely has a nice SHE component to it. It would be a lot more appropriate if we could clearly get the compare and explain of rock processes to be very clear, and to reduce the word count to 600 words.

Do you think we could work with it? I think the current task is a little simple, addresses the curriculum, but simple. I will have a think over the break.

[redacted] colleague

From: [redacted] applicant
Sent: Wednesday, 31 March 2021 4:58 PM
To: [redacted] colleague
Subject: RE: Year 8

Hi [redacted] colleague

I the last time I taught Year 8 was 2017, back then it used to be microscopes, cells and reproduction, so very relaxed. Body systems used to be in Year 9 back then so a tonne more content has been pushed into Year 8 in the intervening years, hence why the Biology content now spills over into the following term.

The BBC documentaries are getting old, they were made in 1998, I don't think they are absolutely necessary. Last year this topic was taught online and I notice there are links to both videos in the OneNote, but if they were watched by students I don't know.

I'm happy to organise Term 2 Year 8, I guess then my big question is, is the aim to cut some content and teach 8 Biology in just one term? Or are we keeping the status quo?

[redacted] practices

Thanks

[redacted] applicant

[redacted] applicant

From: [redacted] colleague
Sent: Thursday, 1 April 2021 11:13 AM
To: [redacted] applicant
Subject: Year 8 Alternatives Term plans

Dear [redacted] colleague

Our conversations have been playing on my mind, and I am trying to find a "best" option. I have attached a spreadsheet that summarises the weekly topics by year since 2019.

I share your concerns wrt the possible magnitude of cells/systems unit, particularly when compared to the Earth and Space unit.

Some alternatives for this year are displayed. As I am not teaching year 8, I would like you and the other teachers to be satisfied with the plan, rather than working with something that someone else (me) has designed. I would appreciate your opinion as to which seems most achievable. If there is an alternative that you can think of, I would be happy to hear that as well.

What are your thoughts?

Regards,

[redacted] colleague

Artefact 1A(1)

From: [redacted] applicant
Sent: Thursday, 1 April 2021 1:42 PM
To: [redacted] colleague
Subject: RE: Year 8 Alternatives Term plans

Thanks [redacted] (colleague) that's certainly some spreadsheet! Interesting how things have chopped and changed so much. Here are my thoughts:

3.6 - review using knowledge of curriculum

2021 Option 1:

I like that Biology is in one term, but in Term 3 tectonic plates, earthquakes and volcanoes are part of Year 9. This could upset the apple cart for Year 9 as the Earth Science assessment is currently on Australian volcanoes. If you remove that Year 8 would have to string earth science out a bit longer. Rocks is better if you keep the pace up, if you drag it out the kids lose interest. So this one is kind of yes/but no.

2021 Options 2 & 3:

(A) As a Biology teacher I would like these options better if cell biology was part of the examinable material, rather than the reproduction topics. I notice that you seem to have a preference for examining reproduction though.

(B) The content descriptor for Year 8 reproduction is "comparing reproductive systems of organisms" so I started to question if the traditional three week time frame on the reproduction topic, including examining teratogens/pregnancy/menstrual cycle, was proportionate to this fairly simple descriptor.

So, here are two further options:

1. To examine cells rather than reproduction, Terms 2 & 3 could look like this:

3.6 - review using knowledge of curriculum and workplace practices

1	**Term 2**	
2	Week 2	Microscopy
3	Week 2	Cell Theory
4	Week 3	Specialised Cells
5	Week 4	Organ Systems; Digestion
6	Week 5	Respiration
7	Week 6	Circulation
8	Week 7	Excretion
9	Week 8	Revision
10	Week 9	Examination
11		
12	**Term 3**	
13	Week 1	A/sexual, Reproductive systems, Puberty
14	Week 2	Menstruation, Pregnancy, Contraception
15	Week 3	Earth Structure; Rock Cycle
16	Week 4	Igneous Rocks
17	Week 5	Sedimentary Rocks
18	Week 6	Metamorphic Rocks
19	Week 7	Assessment task (4 lessons)
20	Week 8	Weathering
21	Week 9	Minerals
22	Week 10	Mining

2.3 – support planning using understanding of curriculum, assessment and reporting requirements

3.6 - review using knowledge of curriculum and workplace practices

2. Or below could be a possible option that splits the reproduction topic into "comparing reproductive systems of organisms" by comparing the structures/functions of the female and male reproductive systems in Tern 2 (could even put flowering plants in, would make a good exam question), but moves the more "sex education" topics out to a two week block at the start of Term 3, not examined. To give a little more time for this perhaps we don't need to teach "Excretion". I think the team could be supportive of this as some teachers (rightly) are very keen on the importance of teaching students about their own reproductive biology, which this preserves.

Term 2	
Week 2	Microscopy
Week 2	Cell Theory applicant
Week 3	Specialised Cells
Week 4	Organ Systems; Digestion
Week 5	Respiration
Week 6	Circulation, Sexual/Asexual
Week 7	~~Excretion~~ Male and female reproductive systems
Week 8	Revision
Week 9	Examination
Term 3	
Week 1	Puberty, Menstruation
Week 2	Pregnancy, Contraception
Week 3	Earth Structure; Rock Cycle
Week 4	Igneous Rocks
Week 5	Sedimentary Rocks
Week 6	Metamorphic Rocks
Week 7	Assessment task (4 lessons)
Week 8	Weathering
Week 9	Minerals
Week 10	Mining

2.3 - support planning using understanding of curriculum, assessment and reporting requirements

This version above would mean that you could keep all of the cells/microscopy questions and most of the reproduction questions on the exam, but some would need replacing such as the fertilisation (SU), menstruation (SIS) and teratogens (SIS).

What do you think?
Regards

[redacted] applicant

From: [redacted] colleague
Sent: Tuesday, 6 April 2021 11:47 AM
To: [redacted] applicant
Subject: RE: Year 8 Alternatives Term plans

Dear [redacted] applicant

I made an effort to have an Easter break – I hope your was okay. I like your second option. I don't have a preference for examining reproduction – this is just a rollover from the last years. I would rather the teachers be satisfied with the content.

Some of the reproduction topics raise some concerns – I emailed [redacted] at the end of last term but haven't heard anything back. I recognise their importance, and we could deal with them in an objective scientific discourse, but taking these out of the topic for examination (to beginning of Term 3) could lead to backlash regarding the "purpose" of their teaching.

We could keep these in Term 2 and move digestion/excretion to Term 3. Do you think this would be workable?

One thing that was not on the plan last year but is in the MSM Calendar for this year is the REACH Science assessment. Previously only the Year 8's sat this, but the department has not used the data to any real degree (as far as I know). We have all of Term 2 to sit, and it is an online test.

Thanks.

[redacted] colleague

Artefact 1A(1)

From: [redacted] applicant
Sent: Wednesday, 7 April 2021 12:30 PM

To: [redacted] colleague
Subject: RE: Year 8 Alternatives Term plans

Dear [redacted] colleague

3.6 - review using knowledge of curriculum and workplace practices

I'm glad you tried to have a break, I did too but chipped away at some marking and reporting while stuck inside with the rain.

I think we have a good plan to go ahead with, keep all the reproduction topics in Term 2, and then have some fun with digestion/excretion to start Term 3. I would be interested in [redacted] opinion on the topics of our reproduction unit as we move towards that part of the term. colleague

I transferred the teaching material to my own term 2 planner to see how it fits in with my timetable, its attached. I allocated one lesson to Reach in week 6 (to be confirmed) as I assumed it would be during Science class time, but maybe not? I can easily fill that lesson in again with content if Reach is not in lesson time.

Can you please have a quick scan of my planner and if you're happy with the content I will put a copy into the teacher OneNote and send a communication to the Year 8 teachers.

2.3 – support planning using understanding of curriculum and assessment

Regards

[redacted] applicant

From: [redacted] colleague
Sent: Sunday, 11 April 2021 10:17 AM
To: [redacted] applicant
Subject: RE: Year 8 Alternatives Term plans

Hi [redacted] applicant

Your plan looks achievable to me and meets curriculum expectations. Please share with the Year 8 teachers.

I have asked some difficult questions of CLT regarding our coverage of sex topics in Science, and broad direction is to follow the AC with text as reference. This means that content that has (Catholic) ethical/moral issues need to be carefully managed. Contraception is one of these. I believe if teaching is science/objectively focused, and deals with the AC curriculum, including hormonal control of body systems (which links clearly to Year 9 topic content), we are approaching this appropriately. I will be continuing these discussions with CLT in person as early as possible next term to ensure our teaching is suitable for [redacted], and we all have a clear understanding. If the documentaries on puberty and pregnancy are required, I will send out a parental notification.

[redacted] colleague

- **Review and planning decisions shared with teaching team to support their planning:**

[redacted] 11/04 2:51 pm applicant 2 2

colleague

08 Science - please head on over to the teacher OneNote for a term planner for Term 2 Biology content. I have had some discussions with [redacted] about what should be included, and the time frame to fit in the content, we tossed around some options and this is what we have settled on. Some aspects to note:

1. Although one term on Biology would be neat, there are several public holidays plus a two day 1/2 cohort excursion which reduce teaching time available, plus Yrs 7-10 exam block starts in week 8 on the 10/6, so time is limited for the relatively large amount of content.
2. Consideration of teaching microscope skills/cells/body systems in Term 2 and moving reproduction content to Term 3 was rejected on the basis that it in our particular school setting reproduction is better placed as part of the assessable curriculum content, not as an "added extra".
3. Therefore, in order to achieve this the agreed plan was to teach reproduction in Term 2, and move digestion and excretion to the first week and a half of Term 3. An understanding of digestion and excretion is expected of students if they study Senior Biology.

I have put together lessons for microscopes and cells in the 2021 folder which should last you for the first three and a bit weeks. Of course feel free to personalise these lessons to your own needs as you wish. Any questions please just ask 🙂

colleague

[redacted] 11/04 2:56 pm 1

Thanks [redacted] 🙂 applicant

2.3 – support to plan and implement using knowledge of curriculum and workplace practices

- **Planner shared on Teacher OneNote as an example to support colleagues with planning**

Teacher 08 Science
Biological Sciences

Administration | Cells and Body Systems 2021 | Exam Revision | Cells and Body Systems 2021@21-05... | 2019 | 2020 | 2022 | Search (Ctrl+E)

colleague

2021 Term Planner (8F)

Sunday, 11 April 2021 2:01 PM

2.3 – support to plan using knowledge of curriculum

school

[redacted]

LESSON PLANNER – CELLS & BODY SYSTEMS
2021 – SEMESTER 1 – TERM 2 (weeks 1-10) – 8F SCIENCE – CTA

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1 (1-5)	19/4 **Student free day – parent teacher conferences**	20/4 **2.1 Introduction to Microscopes** Invention of the microscope Types of microscopes Images seen down microscopes Parts of the light microscope Magnification calculations using ocular and objective lenses AB 2.1 Getting to know your microscope	21/4	22/4	23/4 **Field of view, measuring in micrometers** Demo: Making a wet mount Field of view Focusing and moving a specimen Measuring field of view
2 (6-10)	26/4 Anzac Day	27/4 **Making a wet mount, measuring cell size, drawing cells** How big is an onion cell? Prepare wet mount of onion cells, measure cell size and draw cells. Cell size calculations worksheet	28/4	29/4	30/4 **Introduction to cells** Cell theory Unicellular & multicellular organisms Biological hierarchy Cell size Cell types (prokaryote, eukaryote, plant, animal, fungi) **Ch 2.2 Animal Cells** Cell membrane, nucleus, cytoplasm, mitochondria, endoplasmic reticulum, ribosomes, Golgi complex, lysosomes, vacuole AB 2.4 Size of cells Ch 2.1 Review

Week	Monday	Tuesday	Wednesday	Thursday	Friday
3 (1-5)	3/5 Labour Day	4/5 **Ch 2.2 Plant & fungi cells** Additional plant cell structures of cell wall, vacuole, chloroplasts Comparing plant and animal cells AB 2.2 Plant and animal cells	5/5 Bunyaville excursion (1/2 cohort)	6/5 Bunyaville excursion (1/2 cohort)	7/5 **Science 4 Fun: Observing cheek cells (prepared slides)** **Prac 2.2.3 Microscopic life in pond water** **Activity:** Water movement in plants – set up for observation next week **Review** Chapter 2 Review AB 2.9 Literacy Review
4 (6-10)	10/5 **2.3 Specialised cells in animals and plants** Muscle cells Nerve cells Blood cells Fat cells Guard cells Conducting cells Root hair cells Photosynthetic cells Homework Chapter 2 Review	11/5 **Cells Quick Quiz**	12/5	13/5	14/5 **Ch 3.2 Respiratory system** Structure and function of the respiratory system – trachea, bronchioles, alveoli Structure and function – gas exchange across the alveoli, large surface area, thin walls, concentration gradients of gases Skill Builder p. 124 Measuring your pulse

5 (1-5) applicant	17/5 **Prac** based on 3.2.3 Breathing rate (and include heart rate) linking circulatory system to circulatory system. collcoll	18/5 **Ch 3.3 Circulatory System** Blood vessels - arteries, veins, capillaries Structure and function – thin-walled capillaries as an exchange surface	19/5 coll	20/5	21/5 **Ch 3.3 Circulatory System** The structure of the heart – ventricles and atria, arteries, and veins into and out of the heart Flow of blood around the heart, oxygenated and deoxygenated blood Ch 3.3 Review

2.1 – support to implement engaging teaching and learning

Week	Monday	Tuesday	Wednesday	Thursday	Friday
6 (6-10)	24/5 **Prac 3.3.1 Heart dissection**	25/5 **Ch 4.1 Sexual Reproduction** **Ch 4.2 Asexual Reproduction** Ch 4.1 Review	26/5	27/5	28/5 **4.3 Female Reproductive System** Female reproductive system and menstruation (simple) **Ch 4.3 Male Reproductive System** Male reproductive system
7 (1-5)	31/5 **4.3 Puberty** Changes in males and females during puberty AB 4.4 Reproductive system AB 4.5 Puberty and growth	1/6 **Ch 4.4 Pregnancy** Fertilisation Pregnancy Birth Contraception (brief)	2/6	3/6	4/6 **Reproduction in flowering plants** Prac 4.1.1 Flower structure and pollination **Revision**
8 (6-10)	7/6 **Revision**	8/6 **Revision**	9/6	10/6	11/6 **Exam block**
9 (1-5)	14/6	15/6	16/6	17/6 Athletics Carnival	18/6 Last day of Term 2
10 (6-9)	21/6 Staff correction and reporting week	22/6	23/6	24/6	25/6

Term 3

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1 (1-5)	12/7 **Student free day**	13/7 **3.1 Digestion** Mechanical and chemical digestion Structure and function of the parts of the digestive system – mouth, oesophagus, stomach, small intestine (simple), large intestine	14/7	15/7	16/7 Structure and function of the parts of the digestive continued. Villi as an exchange surface. **Prac 3.1.1 – Breaking down fats and oils?**
2 (6-10)	19/7 **3.4 Waste disposal** Roles of digestive system, liver and kidney in removing body waste Ch 3.4 Review	20/7 Ch 3.1, 3.4 Review **OR** Beginning of Earth Science	21/7	22/7	23/7