

## Year 10 Summer term 1

Year 10 students will study one topic of each biology, chemistry and physics this half term.

		17/04/2023	24/04/2023	01/05/2023	08/05/2023	15/05/2023	22/05/2023
Class	Teacher	week 27	week 28	week 29	week 30	week 31	week 32
10ns/Sc1 and 10ns/Sc2	RAS	<b><u>P6 Radioactivity</u></b> 1. Recap the structure of the atom. 2. How has the model of the atom changed over time? 3. How are electrons arranged in an atom? 4. What is background radiation? 5. What are the types of radiation and what are their properties? 6. How do different atoms decay? 7. How long is something radioactive for? 8. How is radiation used?		<b><u>C11&amp;12 Electrolysis and obtaining metals</u></b> 1. What is the key vocabulary for electrolysis? 2. What happens during electrolysis? 3. Core practical: Electrolysis of copper sulfate. 4. What are the products of electrolysis? 5. How can we tell how reactive metals are? 6. How do we extract less reactive metals from their ores? 7. What is oxidation and reduction in terms of electrons? 8. Why is recycling used and how can it be better than extraction of metals from ores? 9. How can we describe reversible reactions? 10. How does the Haber process work?			
	OBO	<b><u>B7 Animal Coordination</u></b> 1. What are hormones and where are they made? 2. How do hormones control your heart rate? 3. How do hormones control your blood pressure? 4. How do hormones control your metabolic rate? 5. What are the stages of the menstrual cycle? 6. How does contraception reduce the risk of pregnancy? 7. How do hormones control the menstrual cycle and fertility? 8. How do hormones control your blood sugar levels? 9. What is type 2 diabetes?					
10ns/Sc3 and 10ns/Sc4	JBE	<b>C9 Quantitative Chemistry</b>	<b><u>C11&amp;12 Electrolysis and obtaining metals</u></b> 1. What is the key vocabulary for electrolysis? 2. What happens during electrolysis?				

		<div>1. How do I calculate relative formula mass?</div> <div>2. How do we balance equations?</div> <div>3. How do I calculate empirical formula?</div> <div>4. How is mass conserved in a chemical reaction?</div> <div>5. How do we measure the amount of a substance?</div>	<div>3. Core practical: Electrolysis of copper sulfate.</div> <div>4. What are the products of electrolysis?</div> <div>5. How can we tell how reactive metals are?</div> <div>6. How do we extract less reactive metals from their ores?</div> <div>7. What is oxidation and reduction in terms of electrons?</div> <div>8. Why is recycling used and how can it be better than extraction of metals from ores?</div> <div>9. How can we describe reversible reactions?</div> <div>10. How does the Haber process work?</div>
HZA	<div><b><u>P4&amp;5 Waves and Electromagnetic Spectrum</u></b></div> <div>1. How can we describe waves?</div> <div>2. How do we measure and calculate the speed of a wave?</div> <div>3. How are waves reflected?</div> <div>4. How are waves refracted?</div> <div>5. Core practical: Investigating waves</div> <div>6. What are electromagnetic waves?</div> <div>7. Core practical: Investigating refraction.</div> <div>8. What are the parts of the EM spectrum?</div> <div>9. What are the parts of the EM spectrum used for and what are the dangers of the EM spectrum?</div>	<div><b><u>P6 Radioactivity</u></b></div> <div>1. Recap the structure of the atom.</div> <div>2. How has the model of the atom changed over time?</div> <div>3. How are electrons arranged in an atom?</div> <div>4. What is background radiation?</div> <div>5. What are the types of radiation and what are their properties?</div> <div>6. How do different atoms decay?</div> <div>7. How long is something radioactive for?</div> <div>8. How is radiation used?</div>	

10ns/Sc5	CWE	<b><u>P6 Radioactivity</u></b> <ol style="list-style-type: none"> <li>1. Recap the structure of the atom.</li> <li>2. How has the model of the atom changed over time?</li> <li>3. How are electrons arranged in an atom?</li> <li>4. What is background radiation?</li> <li>5. What are the types of radiation and what are their properties?</li> <li>6. How do different atoms decay?</li> <li>7. How long is something radioactive for?</li> <li>8. How is radiation used?</li> </ol>	<b><u>C11&amp;12 Electrolysis and obtaining metals</u></b> <ol style="list-style-type: none"> <li>1. What is the key vocabulary for electrolysis?</li> <li>2. What happens during electrolysis?</li> <li>3. Core practical: Electrolysis of copper sulfate.</li> <li>4. What are the products of electrolysis?</li> <li>5. How can we tell how reactive metals are?</li> <li>6. How do we extract less reactive metals from their ores?</li> <li>7. What is oxidation and reduction in terms of electrons?</li> <li>8. Why is recycling used and how can it be better than extraction of metals from ores?</li> <li>9. How can we describe reversible reactions?</li> <li>10. How does the Haber process work?</li> </ol>
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10ns/Sc6	JTO	<b><u>P6 Radioactivity</u></b> <ol style="list-style-type: none"> <li>1. Recap the structure of the atom.</li> <li>2. How has the model of the atom changed over time?</li> <li>3. How are electrons arranged in an atom?</li> <li>4. What is background radiation?</li> <li>5. What are the types of radiation and what are their properties?</li> <li>6. How do different atoms decay?</li> <li>7. How long is something radioactive for?</li> <li>8. How is radiation used?</li> </ol>	<b><u>C11&amp;12 Electrolysis and obtaining metals</u></b> <ol style="list-style-type: none"> <li>1. What is the key vocabulary for electrolysis?</li> <li>2. What happens during electrolysis?</li> <li>3. Core practical: Electrolysis of copper sulfate.</li> <li>4. What are the products of electrolysis?</li> <li>5. How can we tell how reactive metals are?</li> <li>6. How do we extract less reactive metals from their ores?</li> <li>7. What is oxidation and reduction in terms of electrons?</li> <li>8. Why is recycling used and how can it be better than extraction of metals from ores?</li> <li>9. How can we describe reversible reactions?</li> <li>10. How does the Haber process work?</li> </ol>

10ns/Sc7	RPI	<p><b>C9 Quantitative Chemistry</b></p> <ol style="list-style-type: none"> <li>1. How do I calculate relative formula mass?</li> <li>2. How do we balance equations?</li> <li>3. How do I calculate empirical formula?</li> <li>4. How is mass conserved in a chemical reaction?</li> <li>5. How do we measure the amount of a substance?</li> </ol> <p><b><u>P6 Radioactivity</u></b></p> <ol style="list-style-type: none"> <li>1. Recap the structure of the atom.</li> <li>2. How has the model of the atom changed over time?</li> <li>3. How are electrons arranged in an atom?</li> <li>4. What is background radiation?</li> <li>5. What are the types of radiation and what are their properties?</li> <li>6. How do different atoms decay?</li> <li>7. How long is something radioactive for?</li> <li>8. How is radiation used?</li> </ol>	<p><b><u>C11&amp;12 Electrolysis and obtaining metals</u></b></p> <ol style="list-style-type: none"> <li>1. What is the key vocabulary for electrolysis?</li> <li>2. What happens during electrolysis?</li> <li>3. Core practical: Electrolysis of copper sulfate.</li> <li>4. What are the products of electrolysis?</li> <li>5. How can we tell how reactive metals are?</li> <li>6. How do we extract less reactive metals from their ores?</li> <li>7. What is oxidation and reduction in terms of electrons?</li> <li>8. Why is recycling used and how can it be better than extraction of metals from ores?</li> <li>9. How can we describe reversible reactions?</li> <li>10. How does the Haber process work?</li> </ol>