

KS3-KS4 Chemistry Curriculum Map

<p>Organic</p> <ul style="list-style-type: none"> fractional distillation and cracking can be used to produce hydrocarbon fuels from crude oil Describe combustion reactions 	<p>Analysis</p> <ul style="list-style-type: none"> Use melting points, gas testing to identify pure substances Describe how chromatography & Rf values can analyse dye mixtures 	<p>Resources</p> <ul style="list-style-type: none"> Describe some different ways of making water potable, including salination Describe some ways of using resources 	<p>Environmental</p> <ul style="list-style-type: none"> Describe how the composition of the atmosphere has evolved Explain how human impact is affecting the composition of the atmosphere today 	<p>Exams</p> <p>Next Steps</p>
---	--	---	---	--

Mock Exams, Revision and targeted support

<p>Rates & Equilibria</p> <ul style="list-style-type: none"> Describe & explain the factors that will increase the rate of a reaction Describe a reaction to determine how concentration affects the rate Describe and explain what happens in reversible reactions 	<p>YEAR 11</p>	<p>Quantitative</p> <ul style="list-style-type: none"> Calculate the Mr of different substances Calculate the reacting masses of different reactions 	<p>Electrolysis</p> <ul style="list-style-type: none"> Describe some electrolysis reactions Describe how to set up an electrolysis cell 	<p>Energy</p> <ul style="list-style-type: none"> Describe & explain exo & endothermic reactions Describe a method to accurately record temperature changes 	<p>Bonding</p> <ul style="list-style-type: none"> Describe and explain the properties and bonding in ionic, metallic, simple covalent & giant covalent substances
---	-----------------------	---	--	---	---

<p>Earth & Atmosphere</p> <ul style="list-style-type: none"> Describe the structure of the earth Explain the importance of sustainability & recycling Describe the composition of the atmosphere and the causes & effects of climate change 	<p>Materials Chemistry</p> <ul style="list-style-type: none"> Describe & explain some properties of polymers Describe the properties of ceramics & composites 	<p>YEAR 10</p>	<p>Metals & Metal Salts</p> <ul style="list-style-type: none"> Describe some neutralisation reactions Describe & explain a method to produce a pure dry salt Explain some uses of displacement reactions 	<p>Atomic Structure</p> <ul style="list-style-type: none"> Describe the development of the atom & Periodic Table Describe the subatomic particles in the 1st 20 elements Describe & explain the trend in Gp1,7 & 0 elements
---	--	-----------------------	--	---

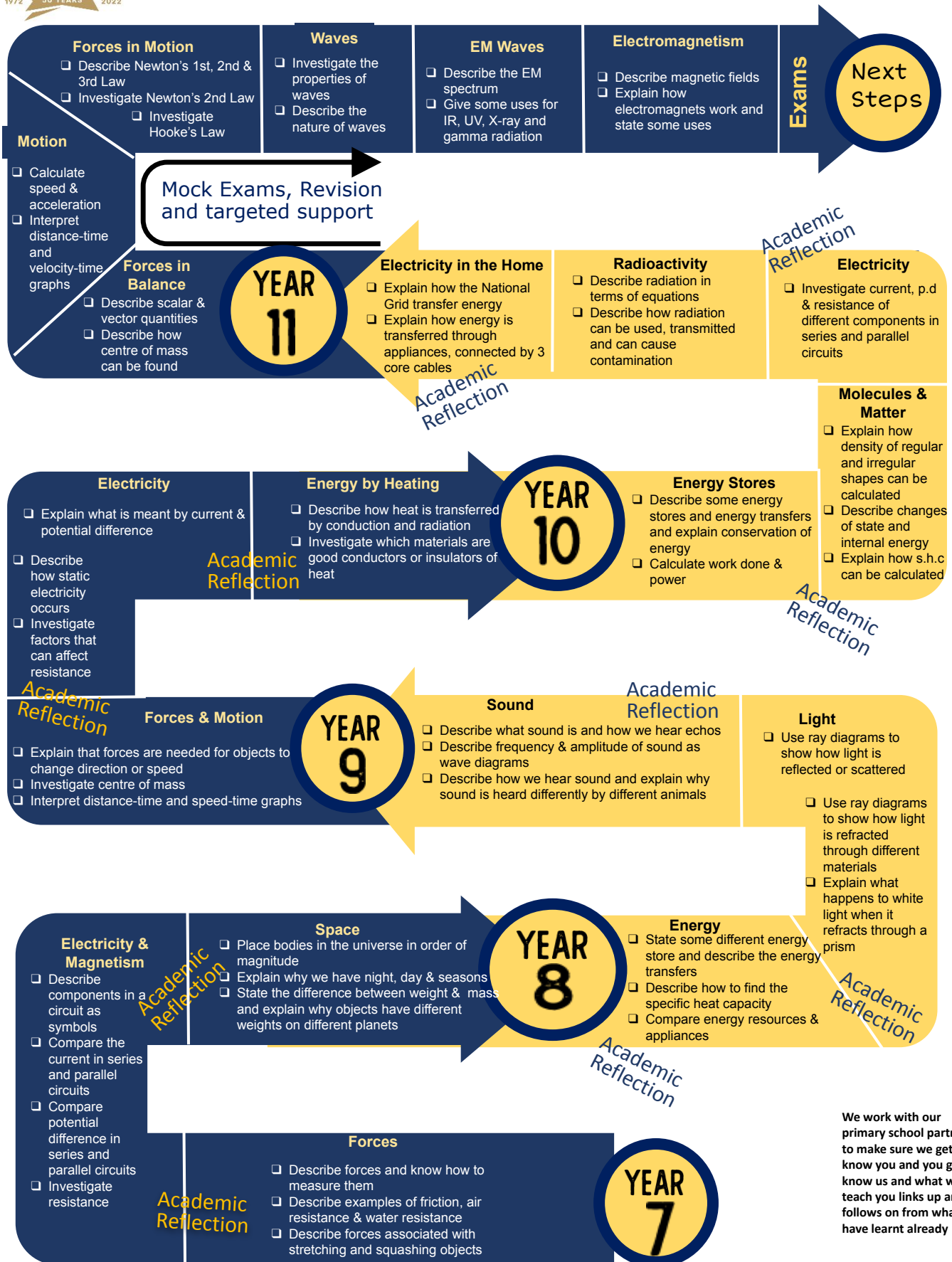
<p>Reactivity Series</p> <ul style="list-style-type: none"> Use practical observations to put metals in order of reactivity Describe what happens in displacement and reduction reactions 	<p>YEAR 9</p>	<p>Acids & Bases</p> <ul style="list-style-type: none"> Describe how indicators can be used to identify acids & alkalis Describe what happens when acids react with bases Describe a method to make dry salt crystals from a neutralisation reaction 	<p>Chemical Reactions</p> <ul style="list-style-type: none"> Describe some observations that occur in chemical reactions Describe the difference between exothermic & endothermic reactions Use experimental data to explain conservation of mass
--	----------------------	--	---

<p>Separating mixtures</p> <ul style="list-style-type: none"> Use particle diagrams to explain the difference between mixture and pure substances Describe some different separating techniques for different mixtures Use particle diagrams to describe solutions 	<p>Elements and compounds</p> <ul style="list-style-type: none"> Use the Periodic Table to find common elements Use formulae & particle diagrams to define common elements & compounds 	<p>YEAR 8</p>	<p>The Periodic Table</p> <ul style="list-style-type: none"> Describe how the Periodic Table has developed over time Explain the position of metals & non-metals with respect to their properties
--	---	----------------------	--

<p>Particles</p> <ul style="list-style-type: none"> Use particle arrangement in solids, liquids & gases to explain their properties Describe the changes of state Explain density, concentration & gas pressure using particle arrangement 	<p>YEAR 7</p>
--	----------------------

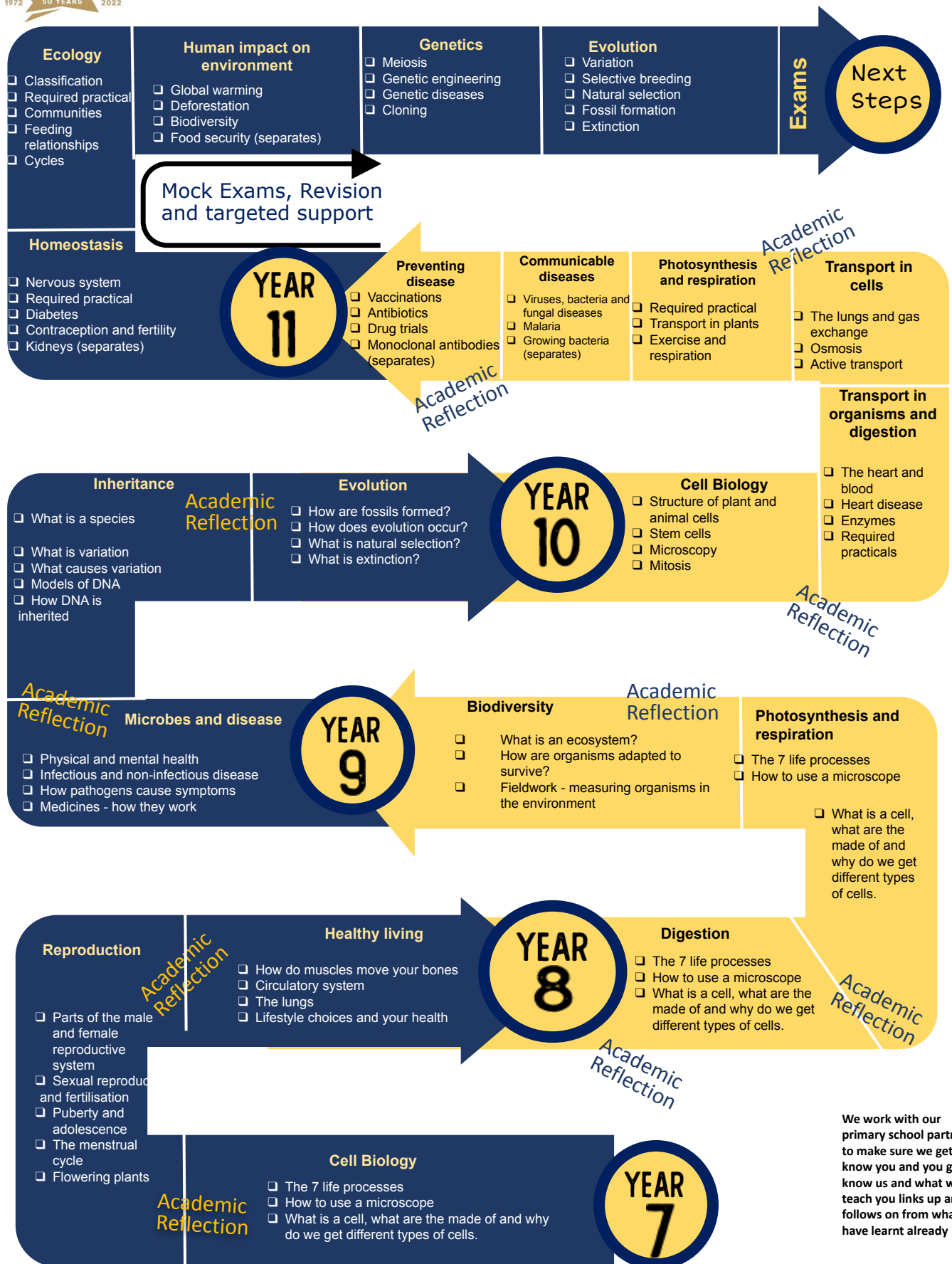
We work with our primary school partners to make sure we get to know you and you get to know us and what we teach you links up and follows on from what you have learnt already

KS3-KS4 Physics Curriculum Map



We work with our primary school partners to make sure we get to know you and you get to know us and what we teach you links up and follows on from what you have learnt already

KS3-KS4 Biology Curriculum Map



We work with our primary school partners to make sure we get to know you and you get to know us and what we teach you links up and follows on from what you have learnt already