

What if? Randall Munroe

Storm in a Teacup: The Physics of Everyday Life

Cosmos: Carl Sagan

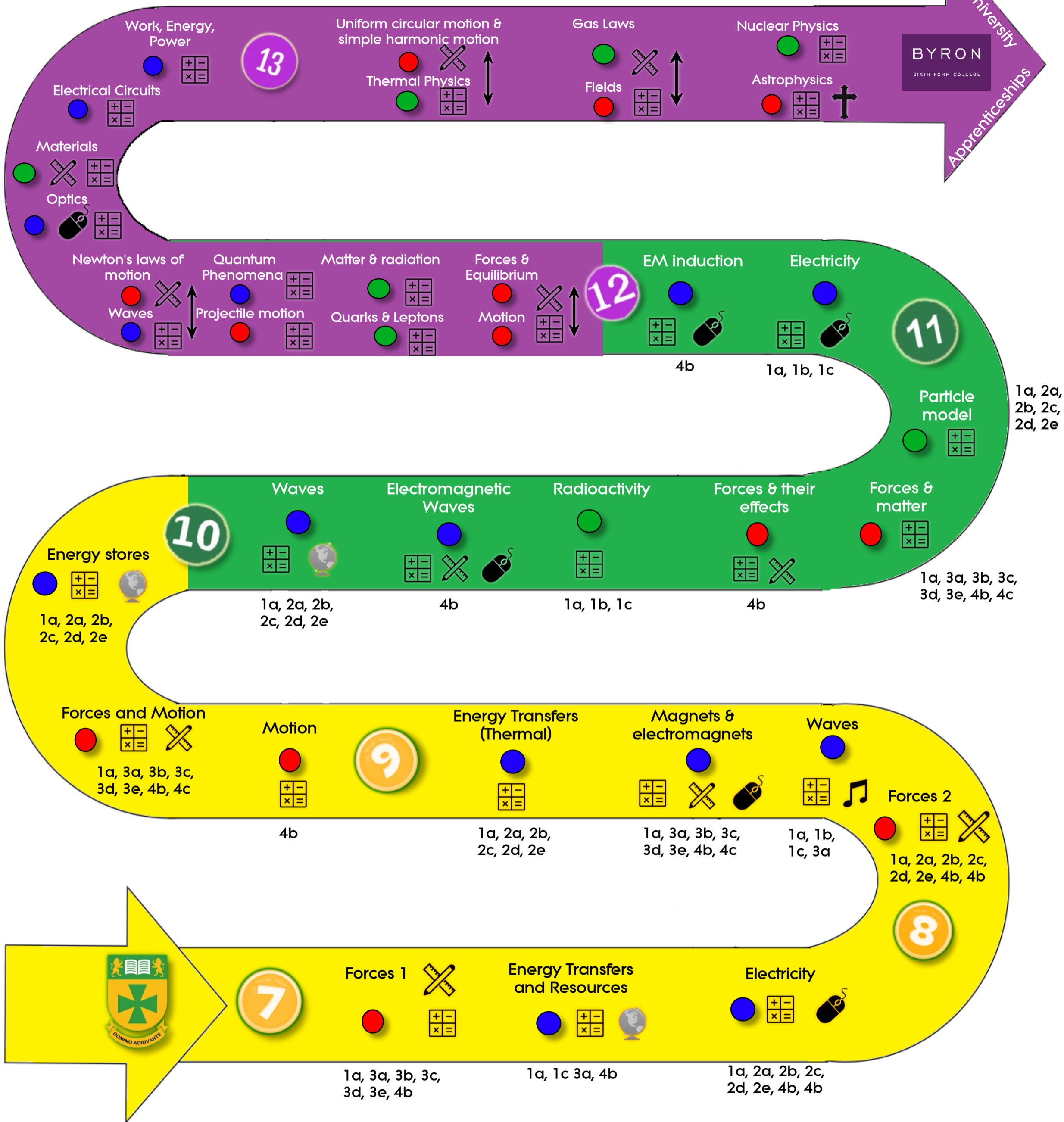
In Search of Shrodingers Cat: John Gribbin

Human Universe - Brian Cox and Andrew Cohen

Astrophysics for Young People in a Hurry: Neil DeGrasse



Physics Learning Journey



Curriculum Links											
ENG	English	Science	Geography	DT	MFL	MFL	PE	RE			
	Maths	History	ICT	Music	Art	Art	Careers	PHSE			

Physics Big Ideas			
●	Forces and motion	●	Particles & Matter
●	Energy and waves		

	Scientific attitudes	Experimental skills and investigations	Analysis and evaluation	Measurement
A	pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility	ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience	apply mathematical concepts and calculate results	understand and use SI units and IUPAC (International Union of Pure and Applied Chemistry) chemical nomenclature
B	understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review	make predictions using scientific knowledge and understanding	present observations and data using appropriate methods, including tables and graphs	use and derive simple equations and carry out appropriate calculations
C	evaluate risks	select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate	interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions	undertake basic data analysis including simple statistical techniques.
D		use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety	present reasoned explanations, including explaining data in relation to predictions and hypotheses	
E		make and record observations and measurements using a range of methods for different investigations; and evaluate the reliability of methods and suggest possible improvements	evaluate data, showing awareness of potential sources of random and systematic error	
F		apply sampling techniques	identify further questions arising from their results	