YEAR 7 CURRICULUM INFORMATION – KS3 Science		
	Spring 1	Spring 2
What will students be learning?	**Biology:** Complete the unit on **Movement** from Autumn 2 • Levels of organisation • The skeleton • Movement: joints • Movement: muscles **Variation** • Introduction to variation • Continuous and discontinuous • Adapting to change **Chemistry:** Complete the unit on **Separating mixtures** from Autumn 2 • Pure substances and mixtures • Solutions • Solubility • Filtration • Evaporation and distillation • Chromatography **Physics:** Complete the unit of **Forces and speed** from Autumn 2 • Introduction to forces • Balanced and unbalanced forces • Speed • Distance-time graphs • Friction and drag • Squashing and stretching • Turning forces **Science Skills:** Complete the unit of **scientific calculations** from Autumn 2 • Using a calculator, calculating mean and range • Calculating percentages	**Biology:** Complete **Variation** unit **Human reproduction** • Adolescence • Reproductive systems • Specialised cells • Introduction to inheritance • Fertilisation and implantation • Development of a foetus • The menstrual cycle **Chemistry:** **Metals and non-metals** • More about elements • Chemical reactions and metals and non-metals • Metals and acids • Metals and oxygen • Metals and water • Metal displacement reactions **Physics:** **Gravity and the universe** • Gravity • The night sky • The solar system • The Earth • The moon and changing ideas **Science Skills:** **Enquiry processes** • Asking Scientific questions • Planning investigations • Collecting, recording and presenting data • Analysing patterns in data

	• Substituting values into formulas and rearranging formulas • Measuring and converting time	• Evaluating data and methods
How will students be assessed?	Milestone assessments In lesson interim knowledge checks Independent homework tasks	Milestone assessments In lesson interim knowledge checks Independent homework tasks
Literacy – What keywords will be taught?	**Biology:** bone, skeleton, muscular skeletal system, bone marrow, joints, cartilage, ligaments, tendons, antagonistic muscle pair, cell **Chemistry:** pure substance, solution, dissolve, solvent, solute, saturated solution, solubility, soluble (insoluble), solubility curve, filtration, filtrate, residue, distillation, chromatography, chromatogram **Physics:** push, pull, contact force, friction, air resistance, gravity, non-contact force interaction pair, newton meter, newton (N), resultant force, balanced. equilibrium, unbalanced, driving force, resistive force, speed, metres per second, average speed, relative motion, distance-time graph, acceleration	**Biology:** adolescence, puberty, sex hormones, reproductive system, sperm cell, testicles (testes), scrotum, semen, sperm duct, urethra, penis, sexual intercourse, egg cell, ovary, oviduct (fallopian tube), uterus (womb), cervix, vagina, gamete, fertilisation, cilia, ejaculation, embryo, implantation, gestation, fetus, placenta, umbilical cord, amniotic fluid, period, menstruation, menstrual cycle, ovulation, contraception, condom, contraceptive pill **Chemistry:** element, Periodic Table, chemical symbol, metal, non-metal, physical property, chemical property, oxide, word equation, reactant, product, oxidation, reactive, reactivity, reactivity series, displace, displacement, thermite reaction **Physics:** gravitational force, field, weight, mass, kilogram (kg), gravitational field strength, artificial satellite, orbit, Earth, Moon, natural satellite, planet, Sun, Solar System, star, galaxy, Milky Way, exoplanet, Universe, light year, asteroid, dwarf planet, axis, day, night, year, season, constellation, phases of the Moon, models, geocentric model, heliocentric model
What employability skills are being developed?	Interpersonal skills Group work Logical and lateral thinking Developing links between topics and ideas Investigative skills Analytical skills	Interpersonal skills Group work Logical and lateral thinking Developing links between topics and ideas Investigative skills Analytical skills
Wider Curriculum Links?	Maths: measuring angles Food/gardening/horticulture Links with other STEM subjects	Maths: measuring angles Food/gardening/horticulture Links with other STEM subjects

What useful websites are there for this topic?	BBC Bitesize KS3 Science KS3 Science - BBC Bitesize	BBC Bitesize KS3 Science KS3 Science - BBC Bitesize
What wider reading could be done for this topic?	There are a selection of KS3 revision guides available online such as: CGP KS3 Science | CGP Books Oxford University Press: Activate KS3 Science	There are a selection of KS3 revision guides available online such as: CGP KS3 Science | CGP Books Oxford University Press: Activate KS3 Science
What else can students be doing independently to develop their understanding of this topic?	Regularly reviewing work and topics completed in lessons Completing further reading around the topics covered Revise for milestone assessments Practice mathematical skills such as range, mean, percentages and graph skills etc	Regularly reviewing work and topics completed in lessons Completing further reading around the topics covered Revise for milestone assessments Practice mathematical skills such as range, mean, percentages and graph skills etc