

Medium Term Plan 2020/21 Subject: Science Term: S1 Topic from LTP: Sexual Reproduction

Lessons per week: 3 Group(s): Rowsell Weir Wood Johnson

Students will show achievement by knowing how the human body changes throughout life. They will also be able to suggest ways of keeping healthy. There are opportunities to use different equipment whilst carrying out investigations which links to independence. The power point presentations will link to communication as they share their ideas. The whole unit ties directly into health and wellbeing. Opportunities to learn about careers include how scientists develop ideas which lead to new products or improve ways of working and will include many jobs in the health care sector.

	Topic	Learning Intentions	Tasks	Vocab	Resources	Assessed IIs
W1	Human Life cycle and body changes	<ul style="list-style-type: none"> To be able to identify the stages of human life including puberty, the menstruation cycle and the menopause To know the correct names of body parts and organs involved in puberty To be able to identifying the natural changes occurring during puberty – physical and hormonal, to include wet dreams and masturbation To be able to sort changes in puberty into male and female changes 	<ul style="list-style-type: none"> Discussion about the need to listen to ideas of others and to be respectful. Clarify that if anybody can use the box to ask questions they may feel uncomfortable asking directly. Sorting the correct stages of the human life cycle and pairing the correct words to the stage What age is good to ... activity (e.g. have a baby) Creating a leaflet and role play to show what general changes occur in human bodies as they get older. Labelling of the parts of the body that change during puberty. 	Puberty Adolescence Menopause Menstruation Cycle Penis Vagina Breast Sweat Erection Discharge Period Ejaculation Wet dreams Masturbation	<ul style="list-style-type: none"> Box to put questions in Cartoon pictures of the different stages of life. Laminated words of names of stages and activities to do at different stages of life Role play starter points Cartoon pictures of parts of the body that change during puberty You tube clips of changes in puberty, girl and boy 	<p>All students should be able to</p> <ul style="list-style-type: none"> Identify the stages of human life including puberty, the menstruation cycle and the menopause Recall the correct names of body parts and organs involved in puberty Identify the natural changes occurring during puberty – physical and hormonal, Sort changes in puberty into male and female changes

			<ul style="list-style-type: none"> • Discussion about what a hormone is and their role in puberty • Discussion about how bodies change in puberty • You tube clip. Boys and girls • Venn diagram sort of things that happen to boys, girls and both • Agony aunt activity to assess understanding students will answer made up questions. Differentiation as appropriate • Discussion about the menopause. This has been in the news a lot lately. Girls will be encouraged to talk about it <p><i>Split of girls and boys for part of these lesson</i></p>		<ul style="list-style-type: none"> • Venn diagram with words (as appropriate for each student) • Agony aunt letter to answer (differentiated for each student) • Article about the menopause and comprehension 	
W2		<ul style="list-style-type: none"> • To be able to identifying why hygiene is important during puberty • To recognise some of the products that can be used and washing techniques to help with hygiene • To know why looking after their health is important through all the stages of life 	<ul style="list-style-type: none"> • Role play about changes in smell, hair etc. Only those comfortable to do this will be asked • Using agar plates to swab parts of the body and to show bacteria is present • Discussion on how different products work e.g. deodorant and shampoo • Creating an advert for a product aimed at teenagers • Creating a power point on the importance of good habits (diet, exercise, sun 	Hygiene Deficiency Nutrients	<ul style="list-style-type: none"> • Role play starters • Agar plates to swab underarm and hair • Different deodorants and shampoo • Pictures of food to create a food plate 	<p>All students should be able to</p> <ul style="list-style-type: none"> • Identify why hygiene is important during puberty • Recognise some of the products that can be used and washing techniques to help with hygiene • Know why looking after their health is important through all the stages of life

			<p>safety, puzzles etc) to look after yourself at all ages</p> <ul style="list-style-type: none"> Preparing a healthy food plate showcasing the nutrients needed at stages in life e.g. energy for stage puberty, iron for loss in menstruation and calcium deficiency in older people 			
W3	Sexual Reproduction	<ul style="list-style-type: none"> To be able to identify and name parts and functions of the human reproductive system. To know the stages in the menstruation cycle To be able to recognise what the sperm and egg cells are and know their functions. To be able to understand how humans reproduce and what happens at fertilisation. 	<ul style="list-style-type: none"> Labelling of the organs in sexual reproduction Recap on sperm and egg as cells, XX and XY Discussion about being in the wrong body and chromosomes Discussion on what happens at fertilisation Answering questions 	<p>Vagina Penis Uterus Fallopian tube Scrotum Testicle Chromosome Erection Ejaculation Fertilisation</p>	<ul style="list-style-type: none"> Label diagram of the human reproductive system Sequencing of the menstruation cycle diagram Picture of sperm and egg 	<p>All students should be able to</p> <ul style="list-style-type: none"> Identify and name parts and functions of the human reproductive system. Recall what happens in the stages of the menstruation cycle Recognise what the sperm and egg cells are and know their functions. Understand how humans reproduce and what happens at fertilisation.
W4	Gestation	<ul style="list-style-type: none"> To understand gestation – and be able to explain what happens to the embryo and foetus over 9 months and birth To be able to recall health needs in pregnancy - the effects of diet, drugs and lifestyle on the unborn baby. 	<ul style="list-style-type: none"> Creating a poster on gestation Discussion about what a drug is Creating a leaflet showing the effects of lifestyle on the health of the mother and foetus 	<p>Gestation Embryo Foetus Drug</p>	<ul style="list-style-type: none"> Pictures of the foetus and embryo throughout the nine months Pictures of healthy and unhealthy things for a pregnant women sort 	

W5	Infertility and STIs	<ul style="list-style-type: none"> To know what a miscarriage is To understand what Surrogacy and IVF are Knowing the facts about reproductive health, including the potential impact of lifestyle on fertility for men and women. 	<ul style="list-style-type: none"> Create a leaflet showing how fertility can be reduced Discussion about how miscarriage can happen Create a power point about healthy lifestyles Food test investigation to find out what is in different foods Investigation into extracting iron from cereal 	Miscarriage Surrogacy IVF Fertility	<ul style="list-style-type: none"> Diagrams of the causes of infertility in males and females Food test equipment and various food Cereal to extract iron and magnets 	<p>All students should be able to</p> <ul style="list-style-type: none"> Recall what a miscarriage is Understand what Surrogacy and IVF are Know the facts about reproductive health, including the potential impact of lifestyle on fertility for men and women.
W6	Contraception	<ul style="list-style-type: none"> To know the facts about the full range of contraceptive choices, how they prevent pregnancy and their efficacy. To be able to identify the prevalence of some STIs, the impact they can have on those who contract them and key facts about treatment and prevention including the use of condoms. 	<ul style="list-style-type: none"> Create a fact sheet about how contraception works and the different types and efficacy Demonstration of milk starch iodine to show spread of some diseases Debate about surrogacy and IVF Discussion about STIs and creating a leaflet about treatment Agony aunt activity to assess understanding 	Contraception Efficacy	<ul style="list-style-type: none"> Different types of contraception 	<p>All students should be able to</p> <ul style="list-style-type: none"> Recall the facts about the full range of contraceptive choices, how they prevent pregnancy and their efficacy. Identify the prevalence of some STIs, the impact they can have on those who contract them and key facts about treatment and prevention including the use of condoms.