The Winchester School (WIN) – JEBEL ALI
National Agenda Parameter (NAP)
Department Information: Primary - Science

AREA OF FOCUS	MODIFICATION OF CURRICULUM	Success/ Impact indicators	WHEN / WHERE	WHO	USEFUL LINKS
TIMSS To embed intuitive & inductive reasoning skills, empowering students to use logical systematic thinking to explain scientific phenomenon in real life settings	SOW Continue to integrate the TIMSS syllabus (GAPS) Earth science taught in Geography Need to developed using cross curricular links between science and geography	Most students demonstrate secure learning initiated by them consistently and independently in a range of situations (confidently answer TIMSS style questions, students create questions , write conclusions and evaluations)	Termly In class	Planners, HOD	https://www.education.com/worksheets/third-grade/earth-science/
	In lessons **Starter** – Concept cartoon to provide question based inquiry **Plenary / Mid plenary –** TIMSS style questions To gauge progress Teacher creating questions Challenging students to create questions	Most students display skills to critically think, solve, analyse & explain problems in lessons Skilful questioning by students and teachers deepens thinking skills and supports understanding of most students. Accurate assessments will ensure the individual needs of pupil is meet.	Ongoing In lessons	Subject teachers	http://geology.com/teacher/ http://www.e-learningforkids.org/science/lesson/center-of-the-ocean-the-sun-the-earth/
To bridge gap identified and ensure similar performance of boys and girls	**Home Learning –** TIMSS style questions and PBL with focus on comprehension skills Early intervention, Monitoring and Close follow up of girls performance Utilization of personalised strategies	Prediction – DATA by the end of KS 2 Above : 94%	In class, every term	Subject teachers	http://primaryleap.co.uk/primary-

	Opportunities for presentation in class and during events (WINSPARKS, SCI Quiz, STEM Olympiad) as a focus for girls GAPS identified year group wise	Most students attain levels according to their potential in both internal and external assessments.			http://study.com/academy/lesson/the-scientific-method-steps-terms-examples.html
	GAPS - Soil Cross curricular with geography Lesson plan for Soil during the unit for Rocks	Most students display skills to critically think, solve, analyse & explain giving solutions Most students will be able to apply their knowledge of	Ongoing		
Curriculum modification according to New frame work	SOW – Integration of new syllabus - Transmission, symptoms and prevention of common communicable diseases Lesson plan to be included in the Healthy lifestyle unit In class Creating question, MCQ, healthy lifestyle week activities	Most students will be able to apply the knowledge to compare and contrast, interpret and analyse information, draw conclusions and formulate questions. Most students will be able to explain different communicable diseases with their symptoms and prevention.	SOW/ Termly	Subject planner, HOD	http://www.soils4teachers.org/lessons-and-activities
PROGRESS TEST SCIENCE To effectively analyse and use PTS data to identified GAPS to inform planning	**Year 3 –** GAPS – Earth science Soil Physical features of the soil and various resources available. Revisiting investigation topics to ensure GAP's are covered	In lessons Most students can confidently recognise and explain the physical features of earth and identify the various resources on earth. Most Students will be able to use and apply their knowledge and inquiry skills to write Aim and prediction with reason independently	Ongoing In lessons	Subject teachers	http://www.soils4kids.org/about

	Critical questioning and thinking time in lessons and through HL Inclusion of Soil in the SOW and LP in greater depth (cross circular with geography) in the unit for ROCKS Comprehension and STEAM in HL PBL in investigations **Year 4 –** GAPS - KEYS Branching database – creation and sorting of living things Soil Physical features of the soil and various resources available. Review of the SOW and LP in greater depth to further embed soil, branching database Cross curricular with different topics and subjects such as UAE studies and real life scenarios Critical questioning and thinking time in lessons and through HL Aim high catering to GAPS and ability wise Revisiting investigation topics with focus on fair testing, prediction with reason and observation table PBL in investigations such as Teeth investigation. Support to lower stanine using individualised HL	Skilful questioning by students and teachers deepens thinking skills and supports understanding of most students. Most students will be able to comprehend an analyse text and answer questions related to it. In lessons Most students can confidently use KEYS to independently classify and derive information Large majority of students can create KEYS independently from real life scenarios Most students will be able to confidently explain the various physical features and resources available Skilful questioning by students and teachers deepens thinking skills and supports understanding of most students Most Students will be able to use and apply their knowledge and inquiry skills to write Aim and prediction with reason , method and observation table independently Students will able to confidently use and apply the knowledge to solve MCQ style questions	Ongoing	Subject teachers Subject teachers Subject teachers	https://www.pinterest.com/pin/490962796860595303/ file:///C:/Users/shafee.b_win/Downloads/habitats.pdf http://www.rsc.org/learn-chemistry/resource/res00002190/science-ideas-web-the-romans?cmpid=CMP00007417 http://physics.tutorvista.com/scientific-methods/scientific-investigation

	Comprehension and STEAM in HL **Year 5 -** GAPS - Non flowering plants Details of different types of non – flowering plants with examples Support provided by specialist secondary teachers/ HOD for explaining non flowering plants to the teachers Critical questioning and thinking time in lessons in form of MCQ and through HL Review of the SOW and LP in greater depth to further embed non-flowering plants and their description with examples Revisiting investigation topics to ensure students are able to write a detailed conclusion independently Support to lower stanine using individualised HL Research and presentation in class Comprehension and STEAM in HL PBL in investigations such as heart rate investigation, evaporation, melting etc.	Most students will be able to comprehend an analyse text and answer questions related to it. In lessons Most students will be able to identify and label with details and explain non flowering plants with examples Most students will be able to comprehend an analyse text and answer questions related to it. Students will be Able to use and apply their knowledge and inquiry skills to write Aim and prediction , method and observation table, conclusion independently Students will able to confidently use and apply the knowledge to solve MCQ style questions Students will be able to confidently collaborate, think independently and present information Most Students will be able to use and apply their knowledge and inquiry skills to write Aim and prediction with reason , method and observation table independently	Ongoing	HOD, planner Subject teachers Specialist teachers HOD, planners	http://www.ducksters.com/science/biology/non-flowering_plants.php http://study.com/academy/practice/quiz-worksheet-flowering-nonflowering-plants-facts-for-kids.html http://daleyscience.weebly.com/uploads/1/3/8/7/13871944/conducting_a_scientific_investigation.pdf http://www.learnhive.net/learn/icse-grade-6/physics/force https://sites.google.com/a/yarmouthscho

	Year 6 - GAPS – Forces Different forces and how they work in real life	In lessons Most students will be able to explain and demonstrate the working of different forces and will be able to attain levels according to their potential in both internal and external assessments.	Ongoing	Subject teachers	ols.org/testingsteam/grade-6 https://www.pinterest.com/jhallrodabaugh/steam-force-and-motion/
	Review of the SOW and LP in greater depth to include Forces Research, presentation, projects in class Support to lower stanine using individualised HL	Students will be Able to use and apply their knowledge and inquiry skills to write Aim and prediction , method and observation table, conclusion and evaluation independently	Every 6 weeks	Subject teacher	https://www.sciencebuddies.org/science-fair-projects/science-fair/steps-of-the-scientific-method
	Revisiting investigation topics to ensure detailed conclusion and evaluation Comprehension and STEAM in HL PBL in investigations	Most students attain levels according to their potential in both internal and external assessments. Most Students will be able to use and apply their knowledge and inquiry skills to write Aim and prediction with reason , method and observation table independently	Every 6 weeks	Subject teachers	
CAT4 To analyse and continue using CAT 4 data to identify groups and provide early intervention	Use of detailed analysis of CAT 4 G&T(ALP/TLP) and low achievers, involving parents to support the students' progress	Most of students make accelerated progress from their starting points due to personalised planning teaching and effective diagnostic marking and feedback oral and written.	Every 6 weeks	Subject teachers	http://practice.ukcat.ac.uk/pages/menu.aspx?pack=ce630588-89fd-40a6-b325-4c55070e9fb5
To personalise LP using student implications and plan next steps	To utilize PBL in helping decipher text (comprehension) and apply the knowledge	Most of the students perform according to their potential in internal and external assessments Lower achievers will make increased progress, narrowing their GAPS in the assessments High achievers and G&T pupils will show accelerated progress and greater depth.		Subject teachers Subject teachers	https://www.tcyonline.com/tests/mock-cat-4

	GAPS – **Verbal Skills** Use of Visual media such as videos, concept cartoons Think pair share, group discussions **Reasoning skills** Creating critical thinking questions using Bloom's taxonomy, thinking time, concept cartoons	Lower achievers will make increased progress, narrowing their GAPS in the assessments High achievers and G&T pupils will show accelerated progress and greater depth. Most students will be able to use and apply their knowledge and inquiry skills independently	Ongoing	Subject teachers	https://www.google.ae/search?q=concept+cartoons&safe=strict&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiblMSJoNvXAhVClxQKHWLcD_cQ_AUICigB&biw=1280&bih=615&dpr=1.5#imgrc=wreCfQZSAKFHOM: