IB PYP Curriculum Map: G4 How the World Works

Transdisciplinary Theme	How the World Works	Central Idea	Exploring physical and chemical changes of matter allows us to understand our world.	Subject Integration	Science, Social Studies, Mathematics	Dates	April 9th - May 18th
Learner Profile Attributes & Attitudes	Curiosity Creativity Cooperation Knowledgeable  Targeted Approaches to Learning Targeted Approaches to Learning Research, Communication, Selfmanagement			Lines of Inquiry & Concepts	<ul> <li>Physical and Chemical changes transform the states of matter.</li> <li>Physical and Chemical changes impact our world.</li> <li>Observations and evidence drives conclusion.</li> </ul>		
Summative Assessment	Goal: Explore chemical and/or physical change and connection to use in real world  Product/Performance: Design their own scientific investigation and present their inquiry cycle to a group of peers sharing the process and outcome of their experiment.  Success indicators: Students will be able to explain the attributes of different states of matter and differentiate between physical and chemical changes. They will connect changes to real world and be able to classify physical and chemical changes that occur in the world.			Key Questions	<ul> <li>What does matter look like and how can we describe it?</li> <li>How can materials be changed?</li> <li>What are chemical/physical changes?</li> <li>What real world examples of these changes can you think of?</li> </ul>		
Unit of Inquiry Integrated and Stand-Alone Learning Outcomes							
Literacy	Students will review how to do procedural writing including the use of strong, specific verbs when writing a procedure. They will be reading information texts in order to research matter, chemical and physical change and specific scientific vocabulary will be studied.						
Mathematics	Students will be measuring time, weight, volume and capacity in a practical way to measure the properties of matter, physical and chemical change. They will need to select appropriate tools of measurement in order to collect data from their experiments. Also, measurement data collected will be graphed and analysed.						
Technology and Media Literacy integration	Students will explore and research states of matter and scientific investigation using online resources such as Brainpop. They will also explore how to search for information on the internet safely and effectively. Students will review the importance of making good notes, sourcing and saving paper while researching and use online tools to support this.						
Arabic	Arabic A:Unit 5: Talents and innovations' horizons Arabic B:Students will learn about jobs and professions and their places. They will learn the plural for feminine and masculine words.						
Music	In music, students will review basic recorder skills. They will define the procedures of creating and changing sound on recorder and reading notation. Students will explore the connection between notes and rhythms and improvise melodies. In strings, students will focus on instrumental technique including how small changes in posture or finger placement can make a big difference in sound. Students will connect prior knowledge in technical skill to new pieces of music.						
PE	Students will be participating in a Fundamentals Games unit in which they will:  • Explore a variety of adapted games.						

	<ul> <li>Understand how to further adapt these games to adjust the difficulty of the game.</li> <li>Develop a further understanding of their own abilities within a variety of challenges.</li> <li>Understand when a game or challenge is too easy or difficult and find a solution to make it more appropriate.</li> </ul>			
Visual Arts	Art students will continue to strengthen their hand-building techniques while working with clay slab. They will create expressive pieces with a focus on line, shape and texture in their slab designs. Students will analyze the relationships between the elements in both the class set of works as well as in their individual pieces. Upon completion, art students will explore the art of portraiture with an emphasis on self-portraits.			
Incursions & Excursions	Grade 4 will be visiting Secondary to perform various experiments in a lab setting.			