

KIS International School Weekly Planning Documentation

Grade:	Teachers and collaborators:	From-To:	Week:
4	Mr. Alex, Mr. Ed, Ms. Jenn	24-28 January	2
Focus LP:	Focus QLB	Key Concepts & Related concepts:	ATLs/Skills:
Inquirers Knowledgeable Thinkers	Striving for understanding	Form, Function and Causation Cause and Effect, Dependent vs Independent, variable, force, mechanics	Thinking Skills, Creative, Research Skills, Information Literacy, Self-management Skills, Organization
TD Theme:	Central Idea:	Lines of Inquiry:	
How the World Works	Scientists can explain the physical world through exploring forces and motion.	<ul style="list-style-type: none"> ● Forces and motion ● How forces and motion interest ● How scientists investigate and use forces 	
Teacher Questions:			
<ul style="list-style-type: none"> ● Does the way and strength you use to apply a force change the way the object moves? ● How do scientists work? ● What is friction? How does it affect motion? ● What do you remember about the scientific method from your mung bean experiment? ● Can you name five scientists and what they are famous for? ● What is gravity? Why isn't there gravity in space? ● What two things do an isosceles triangle, a square, and a regular pentagon have in common? ● If a bicycle is rolling down a hill, what affects how fast it will roll? ● When two objects collide what factors influence what happens to the objects after the collision? 			
Events and Activities:			
	Learning Outcomes/ATLs	Learning engagements	Success criteria/Assessments
UOI:	Recognise that forces affect the stability and motion of objects Understand that gravity exerts a pull on objects which can be counteracted by other forces Explain and demonstrate how equal but opposite forces hold an object in balance	Conduct and observe experiments involving forces and motion. Marble Run experiments - remote at home investigation with gravity and angles.	I can identify forces in action I can describe and measure motion I can find ways to change the direction of an object in motion. I can use the angle of an inclined plane to counteract gravity.

	<p>Explain and demonstrate ways in which forces can affect the stability and motion of objects</p> <p>Explain the effects of gravity on the stasis or motion of objects</p> <p>Demonstrate ways that gravity can be counteracted</p> <p>Identify and demonstrate how inventions have or do use force and energy to make work easier</p>	<p>Toy cars and ramps experiment. What variables affect the motion of objects on ramps?</p> <p>Create experiments that focus on one variable (friction, mass, angle of the inclined plane). Determine the best method for moving an object down an inclined plane either aiming for the fastest time or moving the object as slow as possible without adjusting the ramp midway.</p>	
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	Learning Outcomes/ATLs	Learning engagements	Success criteria/Assessments
<p>Language Arts strands: (LA curriculum)</p>	<p>TTP12 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <p>TTP13 Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</p> <p>TTP14 Use dialogue and description to develop experiences and events or show the responses of characters to situations.</p> <p>TTP15 Use a variety of transitional words and phrases to manage the sequence of events.</p> <p>TTP16 Use concrete words and phrases and sensory details to convey experiences and events precisely.</p> <p>TTP17 Provide a conclusion that follows from the narrated experiences or events.</p> <p>PDW2 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of KAL outcomes up to and including grade 4)</p>	<p>Fiction writing - expanding our stories. How can we improve first drafts? How do we add more content? Strategies for expanding writing. Conferencing with peers and teachers for feedback.</p> <p>Using a story plan to help support longer fiction stories and develop more complex conflicts within the story.</p>	<p>I can apply given feedback to improve my story draft.</p> <p>I can use a plan to develop more events and action in my stories.</p> <p>I can apply my knowledge of types of conflict to my original story.</p>

<p>Planning for Reading</p>	<p>Knowing what we aim to achieve helps us to select useful reference material to conduct research. Synthesizing ideas and information from texts leads to new ideas and understanding. Determine the main idea of a text and explain how it is supported by key details; summarize the text. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</p>	<p>When The Sea Turned to Silver - g4 read aloud Respond to Reading - evaluate a story for types of conflicts make predictions and use evidence to justify your thinking. Make inferences to determine the meaning of unknown words.</p>	<p>I can explain my thinking by citing evidence and examples from the text. I can explain the four types of conflict authors use in a story. I can use my background knowledge combined with clues in the text to make an inferred meaning of a word.</p>
<p>Math <i>Integrated with UOI</i></p>	<p>M1 Understand that the accuracy of a measurement depends on the situation and the precision of the tools Understand that an angle is a measure of rotation Measure and construct angles in degrees using a protractor Use decimal and fraction notions in measurement SS5-Estimate, measure and compare angles using degrees. Construct angles using a protractor measuring and constructing angles using both 180° and 360° protractors</p>	<p>identify and classify angles in the real world. Angles in shapes, investigate the sum of angles in different shapes. For example: Does the sum change in a quadrilateral if the quadrilateral is a parallelogram? How do you use a protractor to accurately measure angles? Drawing and measuring angles.</p>	<p>I can choose an appropriate tool and unit for measurement I can follow steps to measure accurately I can identify the features of 2D shapes</p>

<p>Stand alone math unit - numbers and operations</p>	<p>N1-Recall multiplication facts up to 10 x 10 and related division facts Multiply/Divide 2-digit and 3-digit number by a 1-digit number N2-Investigate and use the properties of odd and even numbers N3-Recognize, represent and order numbers to at least tens of thousands Subtract one 3-digit number from another (equal adding and decomposition) Read, write and model addition and subtraction of integers (negative numbers) Estimate the sum of two 4-digit numbers and add two 4-digit numbers N4-Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems N5-Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 N6-Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division N7-Solve problems involving division by a one digit number, including those that result in a remainder</p>	<p>Math fluency games - youcubed.org set personal goals for math facts fluency practice to develop a strong understanding of the four basic operations. Using various strategies to complete the calculations. Work in math groups to develop our fluency with the four operations.</p>	<p>I can recall basic math facts. I can understand the four operations and use them to solve problems.</p>
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