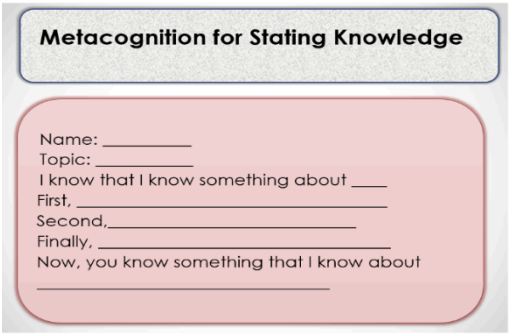
Republic of the Philippines
Department of Education
REGION VIII – EASTERN VISAYAS

LESSON EXEMPLAR IN SCIENCE 9
Quarter 1, Week 1, Day 1-2

MATATAG K to 10 Curriculum – Weekly Lesson Log	School:	Grade Level:	9
	Name of Teacher:	Learning Area:	SCIENCE
	Teaching Dates and Time:	Quarter:	1

I. NILALAMAN NG KURIKULUM, PAMANTAYAN, AT MGA KASANAYAN SA ARALIN (Curriculum Content, Standards and Lesson Competencies)	
A. Nilalaman (Content)	Newton's Laws- 1ST Law of Motion
B. Pamantayang Pangnilalaman (Content Standards)	Newton's laws explain and predict how objects move due to the forces that act on them
C. Pamantayan sa Pagganap (Performance Standards)	By the end of the Quarter, learners demonstrate understanding of the technical meaning of acceleration and apply their understanding to everyday situations involving motion
D. Kasanayan sa Pagkatuto (Learning Competencies)	Identify inertia as the tendency for an object to stay at rest or in motion unless acted on by an unbalanced net force
1. Layunin (Lesson Objectives)	At the end of the lesson, learners are expected to demonstrate understanding with 80% mastery level. (**K**) Define inertia at rest and inertia in motion (**S**) Cite examples showing the difference between inertia at rest and inertia in motion (A) Appreciate the concept of inertia S9FME-1a-1-2
E. Integrasyon (Integration)	MAPEH, DLHT Theme 6 (local Dance, Local Games), ENGLISH
II. BATAYANG SANGGUNIAN SA PAGKATUTO (Learning Resources)	
A. Sanggunian (References)	
1. Mga pahina sa Kagamitang Pang-guro (TG/ TM)	
2. Mga pahina sa Kagamitang Pang-mag-aaral (TX/LM)	
3. Karagdagang Kagamitan (Other References)	
B. **Iba pang Kagamitang Panturo (Other Learning Resources)**	MATATAG Curriculum Guide G9 Q1
III. MGA HAKBANG SA PAGTUTURO AT PAGKATUTO (Procedures)	
A. Balik Aral sa Nakaraang Aralin (Reviewing Previous Lesson)	**Activity 1. WHAT IS MOTION?** Ask students what they know about MOTION. Let them do the following activities. 1. Let the students dance Curatcha using the ZUMBA music. 2. From the template given, let students complete the metacognitive statements with starter phrases as their guide.

	 3. Call at least 3 volunteer students to complete the metacognitive statements. 4. Process students' responses such that the teacher will be able to link the concept of motion to the 1st law of motion or the law of inertia.
B. Paghahabi ng Layunin (Establishing Purpose of the Lesson/ Motivation)	The teacher will ask students to share their experiences/ feelings on something that they need to do but unmotivated to do the task. What is/ are the hindering factor/s of not doing the task? Note: Learners responses will now lead the teacher to establish that objects may move or not due to the presence of external forces. • The Law of Inertia is a Physics concept that describes how objects behave in motion or at rest. ● This Newton's First Law of Motion states that an object at rest will stay at rest and object in motion will start in motion with the same speed and in the same direction unless acted upon by an unbalanced force. ● Meaning, that if no external force is acting on an object. It won't change its state – therefore NO ACCELERATION will occur.
C. Paguugnay ng Halimbawa (Presenting Examples/ Instances of the New Lesson)	Demonstrate to the class what will happen to the basketball when given an initial push and made to travel in the direction of the applied force? And what will happen to the basketball as it was made to stop when an external force is applied on the object/ basketball?
D. Pagtalakay sa Bagong Konsepto (Discussing New Concepts and Practicing New Skills)- #1 Guided Practice/ Exercises (Teacher-Pupil/ Student)	**Video Clip /Pictures** (Note: Teacher has the preference to find for a video clip or pictures based on the given situation). 1. Passenger in a jeepney that moves from rest. 2. Passenger in a moving jeepney that suddenly stops. Let the learners describe the experience of the passenger as shown in the video clip/ pictures Discussion on Inertia at Rest and Inertia in Motion. ● When passengers are seated in a vehicle they are initially at rest, according to the law of inertia, the passengers body will remain at rest until a force acts upon it. Once the vehicle starts to move, passengers must adjust to this sudden change in motion ● When the vehicle accelerates from a stop, passengers may feel a sensation of being pushed back into their seat, this sensation

	occurs, because although the vehicle is moving forward the passengers' body initially wants to stay in the same position due to inertia, the force exerted by the seat ultimately causes the passengers to move with the vehicle.
E. Pagtalakay sa Bagong Konsepto (Discussing New Concepts and Practicing New Skills)- #2 Guided Practice (Student-Student in groups and in pairs)	**ACTIVITY 2. INERTIA AT REST OR INERTIA IN MOTION.** Directions: Divide the class into 2 groups, let the learners perform and answer the activity through a game demonstrating the law of inertia (Note: Refer to the attached worksheets) **Group 1. Sipa ng Patintero** Running a straight path but eventually turned direction after reaching a point with barrier **Group 2. Tumbang Preso/ Tatsi** ● Knock down a can by throwing any object at it. ● Displace the bottle caps/ move all the bottlecaps from the point of reference The teacher will process the observations of the learners through the given guide questions 1. How did you find the activity? 2. How will you relate the activity to the topic on inertia at rest and inertia in motion? 3. How will you differentiate inertia at rest and inertia in motion?
F. Paglinang sa Kabihasaan (Developing Mastery- Individual Activity/ Exercises	Directions: Using a text organizer let the students describe the difference between inertia at rest and inertia in motion. (The teacher will post the table on the chalkboard or wall). Inertia at Rest | Inertia In Motion | | | | | |
G. Paglalapat ng Aralin sa Pang Araw-araw na Buhay (Application)	How will you relate the following situations from the concept of the 1st Law of Motion or the Law of Inertia. (The teacher will post pictures of the 3 situations or examples given below). 1. A car travelling in a straight path 2. Wearing seatbelts 3. Walking
H. Paglalahat ng Aralin (Generalization)	Based on what you have learned, how will you state the 1st Law of Motion knowing that it has both Inertia at Rest and Inertia in Motion?
I. Pagtataya ng Aralin (Evaluating/ Assessment)	Directions: Identify if the situation applies the 1st Law of Motion, write I for Inertia in Action and N for Inertia not applied in the given situation. 1. A galloping horse comes to a sudden stop and the rider was thrown over the head of the horse 2. A book lying on top of the table 3. Walking uphill 4. An object thrown horizontally from a cliff 5. Driving on a slippery road

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<tr><td>J. Karagdagang Gawain (Remediation/ Assignment/ Reinforcement/ Enrichment)</td><td>Directions: Design an art project that illustrates the concept of the 1st Law of Motion or the Law of Inertia.

Rubric

<table>
<tr><td>Indicators</td><td>1
Not Observed</td><td>2
Not Evident</td><td>3
Evident</td><td>4
Beyond Expectation</td></tr>
<tr><td>Application of inertia concept</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Creativity</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Originality</td><td></td><td></td><td></td><td></td></tr>
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<tr><td>IV. Mga Tala (Remarks)</td><td></td></tr>
<tr><td>V. Pagninilay (Reflection)</td><td></td></tr>
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