
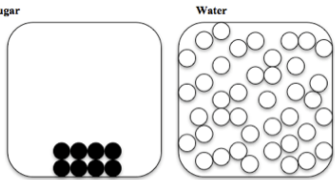

 GRADES 1 to 12 DAILY LESSON LOG	School:		Grade Level:	
	Teacher:	DepedTrends.com	Learning Area:	
	Teaching Dates and Time:		Quarter:	

I. OBJECTIVES	
A. Content Standards	The learners demonstrate an understanding of the particle nature of matter as basis for explaining properties, physical changes, and structure of substances and mixtures
B. Performance Standards	The learners shall be able to present how water behaves in its different states within the water cycle
C. Learning Competencies Write the LC code for each	The learners should be able to explain the properties of solids, liquids, and gases based on the particle nature (S8MT-IIIa-b-8)
D. Learning Objectives	Infer from given situations that matter is made of tiny particles
II. CONTENT	The Particle Nature of Matter: Elements, Compounds, and Mixtures
III. LEARNING RESOURCES	
A. References	
1. Teacher's Guide pages	
2. Learner's Materials pages	174-175
3. Textbook pages	
4. Additional Materials from Learning Resource (LR) portal	
B. Other Learning Resources	
IV. PROCEDURES	
A. Reviewing previous lesson or presenting the new lesson (2 mins.) elicit	<p>Review: Draw two circles on the board. Label with Matter and Non-matter. Let the students fill the circle with examples and properties.</p> <p>Sample:</p> 
B. Establishing a purpose for the lesson (1 min.) Engage	Group the students to five (5) and distribute materials for the activity.
C. Presenting examples/ instances of the new lesson Explore (2-5 mins.)	How do engineers/carpenters construct a wall? How does pieces of hollow blocks make the wall solid as one object? (<i>Brainstorm with the students to come up with the idea of particles as component of matter</i>)
D. Discussing new concepts and practicing new skills #1 Explain (15 mins.)	<p>Introduce to the students the concept that matter is made up of smaller particles too. Use the illustration below.</p>  <p>Source: http://scientificargumentation.stanford.edu/assessments/mixing-sugar-and-water/</p>

<p>E. Discussing new concepts and practicing new skills#2 (10 mins.)</p>	<p>Let the students perform Activity 2 (p. 174 of LM). Let them brainstorm with their group and answer Question 1 to 8.</p>
<p>F. Developing mastery (Leads to Formative Assessment 3) (12 mins.) Elaborate</p>	<p>Group presentation of answers. Teacher will process students' answers and make possible corrections. <i>Activity 2 Question 1 to 8 Answers</i></p> <div style="border: 1px solid black; padding: 10px;"> <p>Q1. The resulting mixture tastes sweet.</p> <p>Q2. The mixture is sweet because sugar is still present but we cannot see it anymore. The sugar particles mixed well with the water particles.</p> <p>Q3. (Expect students to give a volume less than 70 mL.)</p> <p>Q4. The volume of the resulting mixture is <u>less than</u> the sum of the volumes of the unmixed sugar and water.</p> <p>Q5. The combined volume is less than the sum of 20 mL sugar plus 50 mL water. This shows that water is made up of tiny particles with spaces between them. The sugar particles are able to fit into these spaces because the sugar particles that dissolved in water are very small. These could not even be observed with the unaided eye.</p> <p>Q6. The food coloring flowed along the side of the bottle and spread slowly towards the bottom of the container and began to spread through out the water.</p> <p>Q7. After one day, the food coloring has totally spread through out the water since the resulting mixture has a color almost the same as that of the food coloring.</p> <p>Q8. Since both the food coloring and water are made up of particles, the particles of food coloring are able to fit into the spaces of the water molecules.</p> </div>
<p>G. Finding practical applications of concepts and skills in daily living (3 mins.)</p>	<p>Are you convinced that matter is made up of tiny particles? <i>Answer: Yes or No. Let the students justify their answer</i></p>
<p>H. Making generalizations and abstractions about the lesson (3 mins)</p>	<p>Who among you have travelled or is living in the barrio? Compare the quality of air in the Barrio and in the City? (<i>Brainstorm students to come with the idea that air in the city is polluted.</i>) Is it possible to clean the air by separating particles of pollutants from air particles? Justify. <i>Answer: Yes. You may use the video as a reference or let the students view the video.</i></p> <p>In-car filter systems</p>  <p>https://www.theguardian.com/cities/2017/feb/15/10-ways-to-beat-air-pollution-how-effective-are-they_ or https://youtu.be/8YBXp8HNLH4</p>

I. Evaluating learning (8 mins)	Essay: Is matter made of tiny particles? Justify your answer. Criteria: Content 15 points; composition/presentation of ideas 5 points = Total: 20 points
J. Additional activities for application or remediation (1 min)	Have an advance study on the discovery of atom (page 175-177 of LM)
V. REMARKS	
VI. REFLECTION	
A. No. of learners who earned 80% on the formative assessment	
B. No. of learners who require additional activities for remediation.	
C. Did the remedial lessons work? No. of learners who have caught up with the lesson.	
D. No. of learners who continue to require remediation	
E. Which of my teaching strategies worked well? Why did these work?	
F. What difficulties did I encounter which my principal or supervisor can help me solve?	
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?	

Prepared by:

Checked by

Teacher

School Head

Observed by:
