

## Module 2

# Quipper as Instructional Materials

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## Lesson 2: Student's Learning Guide

The influence of different media like television and Social media is reflected in society as a whole. Students are having different interests and views on education. They want education that is fun, dynamic, and different such as the digital image and web sites. Quipper is continuously developing Instructional materials that Teachers and Students can use in order for them to learn new knowledge.



### Objectives

At the end of this lesson, you should be able to

- identify the parts and features of Study Guide
- appreciate the value of study guide as additional learning materials for the students
- demonstrate your lessons effectively using 2 or more parts of the study guide



### Warm-Up

#### Word Search

L	B	C	P	W	D	E	L	J	K	H	S
A	E	E	R	Z	O	F	T	O	C	A	E
S	Y	S	E	P	G	Q	R	Q	P	N	V
S	Y	U	S	K	C	S	B	P	D	P	I
I	I	E	E	O	H	Z	L	X	N	F	T
G	N	R	N	G	N	I	B	Y	O	M	C
N	E	U	T	Y	C	P	T	F	C	V	E
M	Z	F	A	A	G	B	R	H	I	E	J
E	C	J	T	A	P	O	Y	O	P	X	B
N	N	I	I	Q	Z	U	V	U	P	M	O
T	O	R	O	O	Z	C	S	Y	H	E	Y
N	X	K	N	H	B	N	X	W	E	P	R

Search for the following words that are essential in preparing a lesson plan.

**Assignment**

**Objectives**

**Motivation**

**Lesson Proper**



## Lesson Proper

GRADE 7 | MATHEMATICS

UNIT 14

### Measures of Central Tendency

A set of data can be described in many different ways. One way to describe it is by using measures of central tendency. You may not realize but these are oftentimes used in many different fields.

The mean, for example, is important in sports. Sports analysts may use averages to determine how well a particular basketball player plays in a series of games.

The median plays an important role in economics. It can be used by economists as basis for the distribution of household income in a particular city into two groups—one that is above the median household income and one that is below that amount.

SHOP

**Objectives**

At the end of this unit, you should be able to

- illustrate the measures of central tendency (mean, median, and mode) of a statistical data;
- calculate the measures of central tendency of ungrouped and grouped data; and
- use appropriate statistical measures in analyzing and interpreting statistical data.

**Lesson 1: Mean, Median, and Mode of Ungrouped Data**

**Warm Up!**

**Die-Hard Five**

**Materials Needed:** die, paper, pen

**Instructions:**

1. Roll a die five times. Write the results in the boxes provided below and solve the number sentence formed.

+  +  +  +  =

**Performance Task Rubric**

(Passing Grade: 75%)

Criteria	Below Expectation (0-49%)	Needs Improvement (50-74%)	Successful Performance (75-99%)	Exemplary Performance (100%)	Rating
Completeness & Reliability of Information	A significant amount of information is missing.	The information provided in the report is complete but unreliable.	The information provided in the report is complete and reliable.	The information provided is complete and reliable, and has a clear basis.	
Accuracy of Computation and Analysis of Data	There are a significant number of errors in computations that lead to wrong analysis of data.	There are a few errors in the computation, but there is no clear basis in the analysis of data.	All computations are correct, and the data are analyzed properly.	All computations are correct and with complete solution. The data are analyzed with clear basis.	
Organization of Data/Ideas	Data are not organized properly.	Data are organized properly but some necessary parts are missing.	Data are organized properly. All information needed in the analysis is present.	Data are organized properly. All information needed in the analysis is present.	
Total					

Lesson planning is one of the most challenging tasks in the life of a teacher. It includes creating different activities and assessments based on students' learning needs. With the help of the study guide, teachers can save a lot of time preparing for a lesson. The saved time can be used in giving feedback or creating more activities as an intervention for low-performing students.

The **study guide** is a comprehensive compilation of content for a specific subject that teachers and students can use as a downloadable textbook or reference. It has various activities that teachers can use as a formative or summative assessment. Also, performance tasks are available with ready-made rubrics for easy evaluation. Click this link for a sample [study guide](#).

### What do you think?



In this generation, where resources are available at your fingertips, do you think your students' engagement and participation increased? Did you notice any improvement in their performance?

### Subjects with Study Guide

Here is the list of subjects in Quipper with downloadable Study Guide:

<b>Elementary and Junior High</b> (Grades 4 to 10)	<b>Senior High</b> (Grade 11 and 12)
<ul style="list-style-type: none"> <li>• Filipino</li> <li>• English</li> <li>• Mathematics</li> <li>• Science</li> <li>• Araling Panlipunan</li> <li>• Music</li> <li>• Arts</li> <li>• Physical Education</li> <li>• Health</li> <li>• Technology and Livelihood Education (TLE) - Only for grade 7 and 8</li> <li>• ICT</li> </ul>	<ul style="list-style-type: none"> <li>• General Mathematics</li> <li>• Statistics and Probability</li> <li>• Earth and Life Science</li> <li>• Earth Science</li> <li>• Physical Science</li> <li>• Oral Communication in Context</li> <li>• 21st Century Literature from the Philippines &amp; the World</li> <li>• Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino</li> <li>• Reading and Writing Skills</li> <li>• Pagbasa at Pagsusuri ng Iba't Ibang Teksto Tungo sa Pananaliksik</li> <li>• Contemporary Philippine Arts from the Regions</li> <li>• Understanding Culture, Society, and Politics</li> <li>• Personal Development</li> <li>• Introduction to the Philosophy of the Human Person</li> <li>• Disaster Reduction and Risk Readiness</li> <li>• Media and Information Literacy</li> <li>• Physical Education &amp; Health 11</li> <li>• Physical Education &amp; Health 12</li> </ul>

### Features of a Study Guide

In the previous lesson, different instructional design frameworks and how it could be applied to your lesson plan. In Quipper's study guide, Gagne's Nine Events of Instruction was applied in which teachers can use inside the classroom. For example, the first event of instruction is to gain the attention of the students. The equivalent part of it in the study guide is motivation or Warm-Up! activities.

To know more about the study guide, here are the other features:

Features	Description
<b>Table of Contents</b>	It is a clickable overview of the contents of the whole module
<b>Objectives</b>	It helps the students know the target outcome of the module and sets the expectation of the students
<b>Motivation</b>	It provides activities that make the topic interesting and prepares the students for the lesson.
<b>Lesson Proper</b>	It provides an explanation of the concepts and topics of the lesson
<b>Assessments (Formative and Summative)</b>	It gives exercises, tasks, and questions that help teachers assess students' understanding after the lesson discussion
<b>Performance Task</b>	It gives an output-based activity that helps evaluate the application of students' knowledge
<b>Summary</b>	It provides synthesis or generalization of the lesson or the big ideas of a concept with key terms & formulas for students' easy reference.
<b>Reference</b>	It shows references used in creating the lesson. Provided links are also clickable.

### Comparison of Study Guide per Subject

Each subject has different titles or headings in the Study Guide to create variety. They may have different headings; the function and purpose are still the same.

Features	English	Math	Science	Filipino	AP
<b>Objectives</b>	Unit Objectives	Objectives	Objective	Layunin Natin	Layunin Natin
<b>Motivation</b>	Warm-up!	Warm-Up!	Warm-Up!	Basahin Natin	Subukan Natin
<b>Lesson Proper</b>	Learn About It!	Learn About It!	Learn About It!	Pag-aralan Natin	Pag-aralan Natin
<b>Summative Assessment</b>	Check Your Understanding	Check Your Understanding	Check Your Understanding	Pag-isipan Natin	Suriin Natin Gawin Natin
<b>Formative Assessment</b>	Let's Step Up! Let's Check-In!	Let's Practice! Challenge Yourself	Challenge Yourself	Sagutin Natin Subukan Natin Isaisip Natin	Sagutin Natin Pag-isipan Natin
<b>Performance Task</b>	Performance Task	Performance Task	Performance Task	Gawin Natin	Pagyamanin Natin
<b>Other Features</b>	Vocabulary Essential Question	Test Your Pre-requisite Skills	Essential Questions Review Key Points Web Links Laboratory Activity Self-Check Key Words	Paglalogom Dapat Tandaan	Alamin Natin Paglalogom Dapat Tandaan



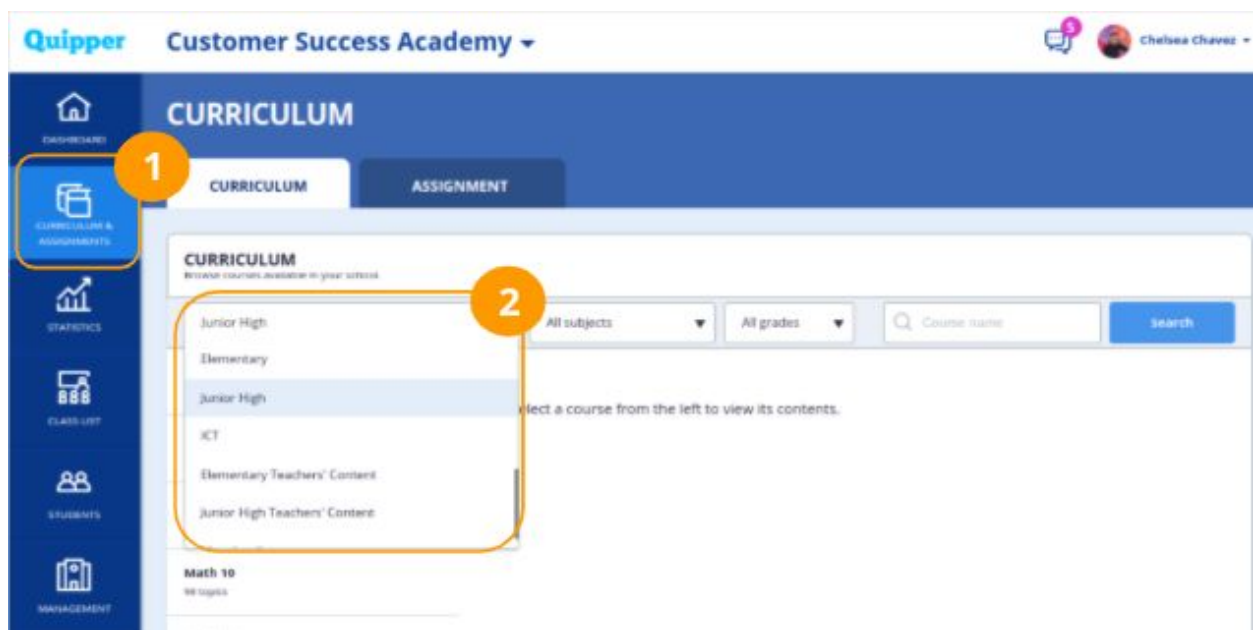
### Try It!

Check out the study guide of other subjects like MAPEH, TLE, ICT, and see how they vary from each other.

### How to Access the Study Guide?

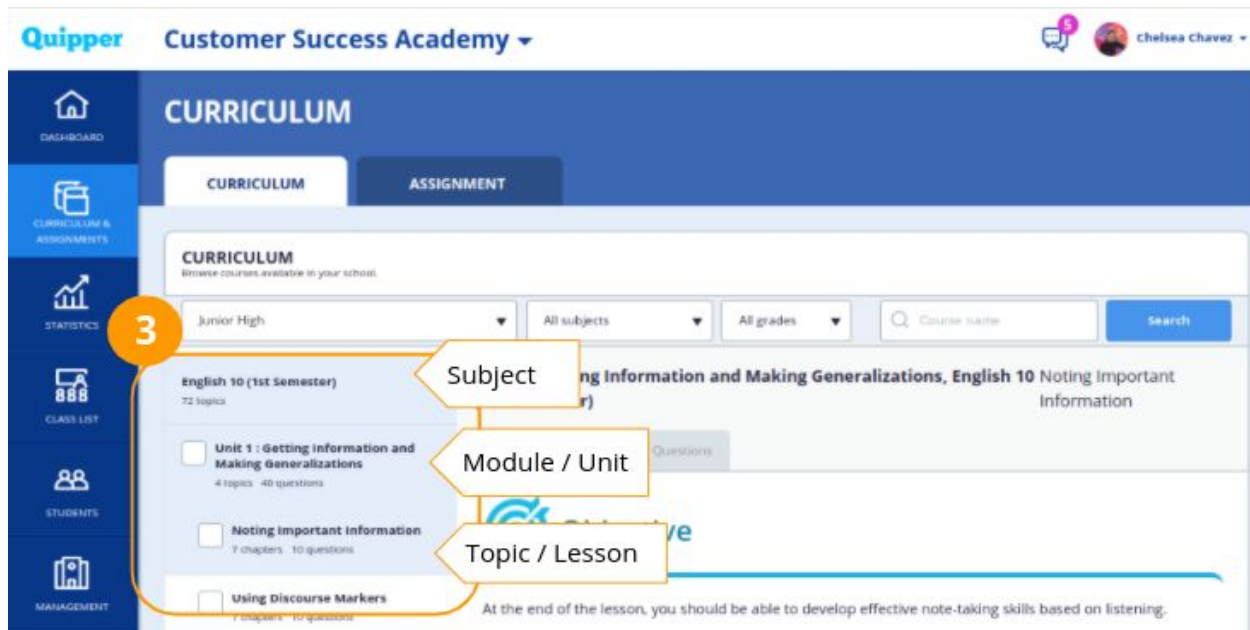
Teachers can access the study guide by following these steps:

1. Open your Q-Link account and go to Curriculum and Assignments
2. Choose grade level under the course list dropdown box

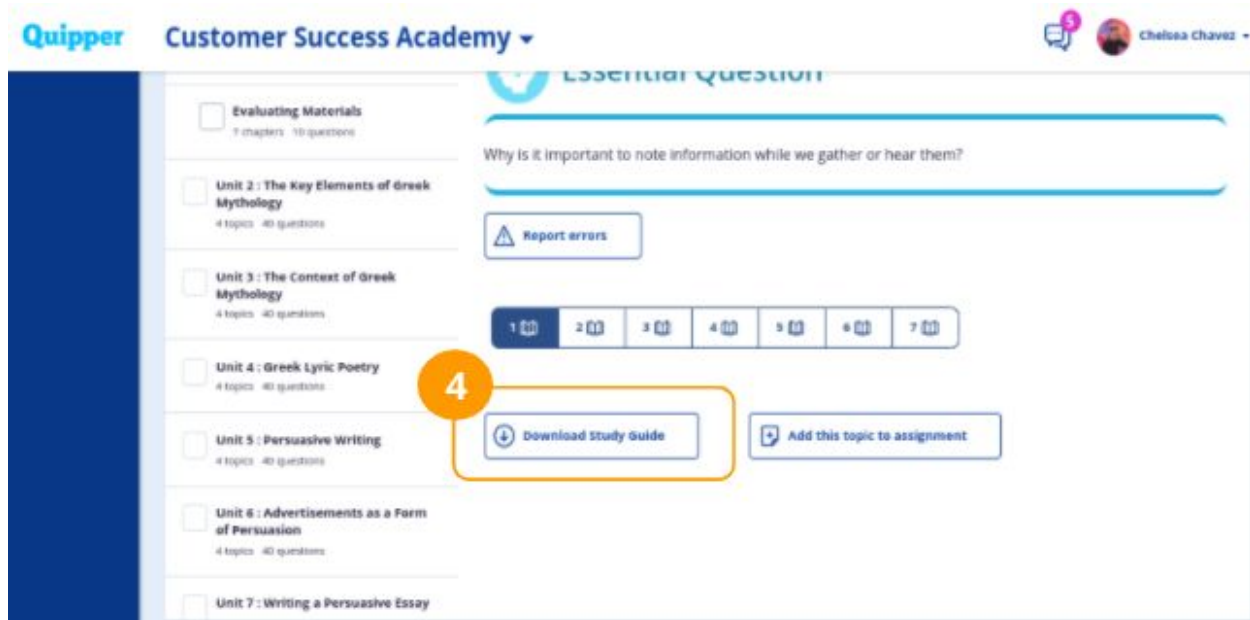




### 3. Choose a Subject, Module, and Topic



### 4. Lastly, Click Download Study Guide

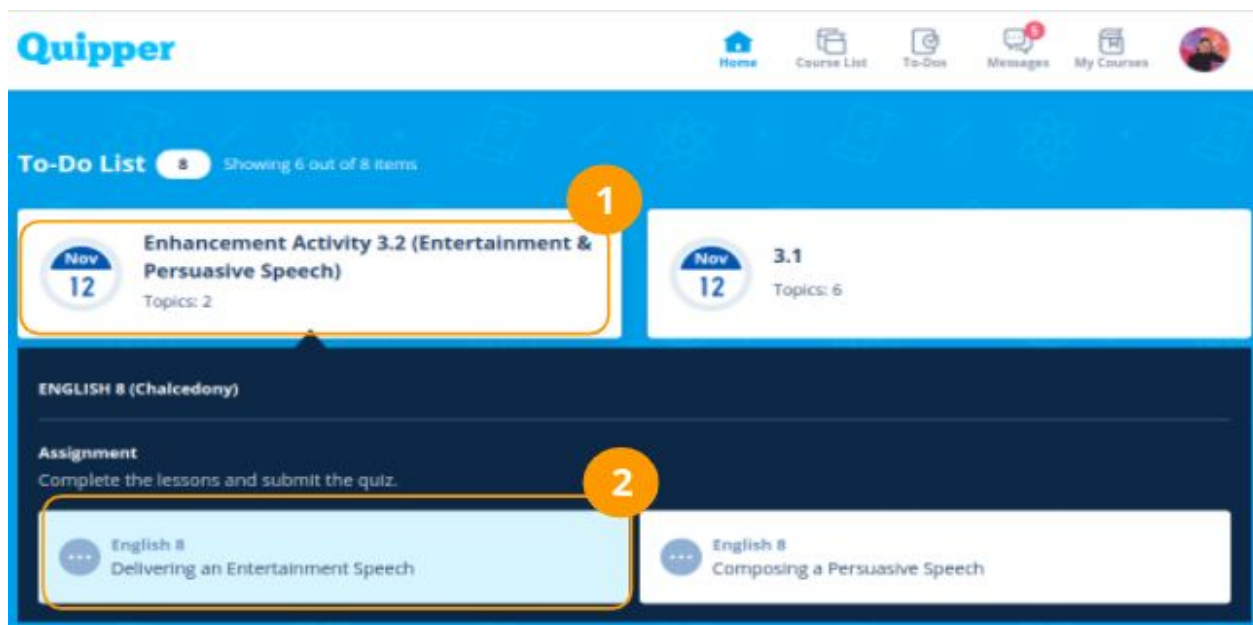


Note: The Study Guide will open a new window and you can save it to your device.

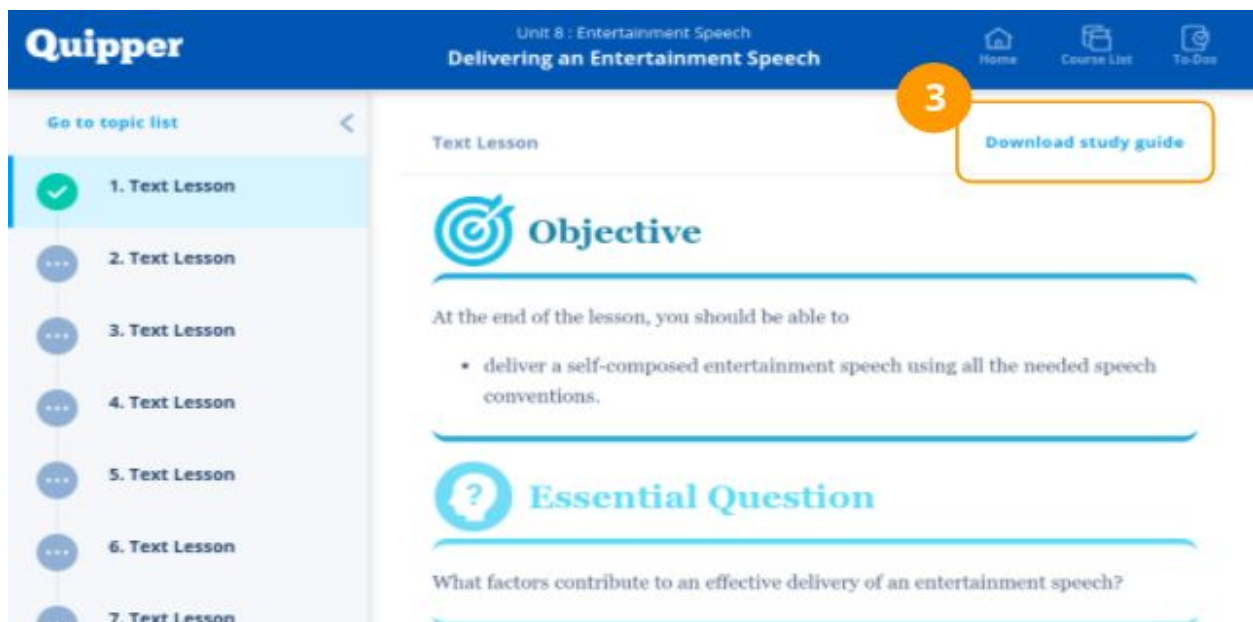
## Module 2: Quipper as Instructional Materials

**Students** can access their study guide by following these steps:

1. They must open their Q-Learn account and click current assignment in To-Do List
2. Choose a topic



3. Click Download Study Guide





### Remember

Students can only access and download the study guide if their teachers sent it as an assignment.



### Tips

- Print the Check Your Understanding part of the Study Guide and use it as a summative Quiz
- Send all the topic as Quiz and Review a week before the final exam to serve as a reviewer for the students
- Students without an internet connection, once downloaded, attach the pdf copy of Study Guide and send it to your student through email or Facebook messenger



## Check Your Understanding

**Direction:** Match column A with the correct answer to Column B. (5 points)

### COLUMN A

\_\_\_\_ 1. an output-based activity for the application of students' knowledge and serves as evidence of learning

\_\_\_\_ 2. help the students to know where the unit is going and what is expected at the end of the lesson

\_\_\_\_ 3. activities that will make the topic being discussed interesting and set the mood of the students

### COLUMN B

A. Lesson Proper

B. Motivation

C. Objectives

\_\_\_\_ 4. exercises, tasks, and questions that will help teachers to assess students' understanding after the discussion

D. Performance Task

\_\_\_\_ 5. explanation about what the lesson is all about.

E. Assessments

**Direction:** Answer the question below.

Download a study guide of your current subject. Then, choose two parts and explain how you will use it inside the classroom. (5 points)

**Link to Essay** 

- [Share your answer here](#)



## Wrap up

**STUDY GUIDE** IS A TOOL THAT TEACHERS CAN USE TO HELP STUDENTS  
LEARN THEIR LESSONS IN THE CLASS. IT CONSISTS OF THE FF:

<b>Objectives</b>	→	goal at the end of the lesson
<b>Motivation</b>	→	gain students attention
<b>Lesson Proper</b>	→	explanation of the lesson
<b>Assessments</b>	→	checking of understanding
<b>Summary</b>	→	Generalization

### Lesson 2: Teacher's Content

#### Objectives

At the end of this lesson, learners should be able to

- identify the parts and features of Teachers Content;
- appreciate the value of teachers content as additional learning resources; and
- demonstrate his/her lessons effectively using 2 or more parts of teachers content

#### Warm-Up

C H A N G I N G B A G F  
 T N E M E V L O V N I U  
 O N T I O P P O F F G F  
 O L V X P O J K J X O O  
 S E L F D I R E C T E D  
 S K S A T W M S U H Q N  
 O U T C O M E S S B J S  
 G N I H C A E T O A E A  
 X O O A T R M M S C L X  
 V I O P O W C A L W L C

Teaching has increasingly become more difficult with time, and student success is falling at an alarming rate.

Complete the list below of the 7 most common challenges faced by teachers today:

1. Inspiring students to be more \_\_\_\_\_
2. Improving Learning \_\_\_\_\_.
3. Differentiating and personalizing \_\_\_\_\_.
4. Getting students to do their work outside the \_\_\_\_\_.
5. Finding the time to keep up with administrative \_\_\_\_\_
6. Understanding \_\_\_\_\_ Technology.



### Essential Questions

- What are the different parts and features of Teachers' Content that will be useful in creating the lesson plan effectively?
- How to find these learning resources using Quipper's teacher platform?
- How to integrate Quipper in the teacher's lesson plan?



### Lesson Proper

**Teachers' Content** is a one-stop-shop for teachers in need of resources for Math, Science, English, Araling Panlipunan, and Filipino. It provides a plan on how the teacher could implement a specific lesson based on the DepEd curriculum guide. It aims to integrate pedagogy with subject matter content and effective use of technology in the following subjects and grade levels.

#### Subjects with Teachers' Content

##### Grades 4 to 10

- Math
- Science
- Filipino
- English
- Araling Panlipunan

##### Senior High School Core Subjects

- General Math
- Statistics and Probability
- Earth Science
- Earth and Life Science
- Physical Science
- 21st Century Literature from the Philippines and the World
- Oral Communication in Context
- Reading and Writing Skills
- Pagbasa at Pagsusuri ng Iba't Ibang Teksto Tungo sa Pananaliksik
- Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino

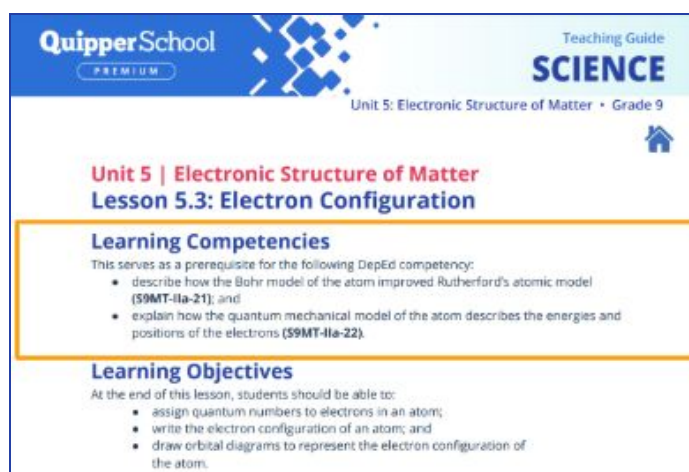
### Components of the Teaching Guide

The Teachers' Content Package consists of a downloadable teaching guide, an editable lesson slides, and some additional resources.

#### Downloadable Teaching guide

The downloadable teaching guide is similar to the teachers' lesson plan. The teacher could use this as a reference in creating a detailed lesson plan or may use it depending on the need of the students.

**Learning Competencies** is a list of competencies copied verbatim from the DEPED curriculum guide along with DEPED code for easy reference.



**QuipperSchool**  
PREMIUM

Teaching Guide  
**SCIENCE**

Unit 5: Electronic Structure of Matter • Grade 9

**Unit 5 | Electronic Structure of Matter**  
**Lesson 5.3: Electron Configuration**

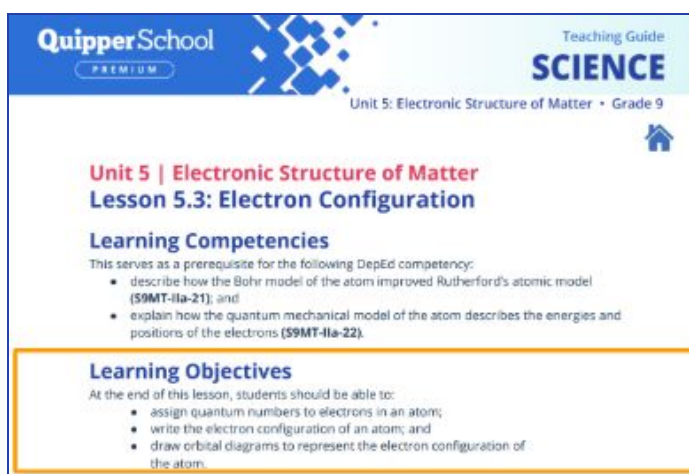
**Learning Competencies**  
This serves as a prerequisite for the following DepEd competency:  

- describe how the Bohr model of the atom improved Rutherford's atomic model (**S9MT-IIa-21**); and
- explain how the quantum mechanical model of the atom describes the energies and positions of the electrons (**S9MT-IIa-22**).

**Learning Objectives**  
At the end of this lesson, students should be able to:  

- assign quantum numbers to electrons in an atom;
- write the electron configuration of an atom; and
- draw orbital diagrams to represent the electron configuration of the atom.

**Learning Objectives** are statements that describe what students are expected to learn by the end of the lesson. It contains SMART (specific, measurable, attainable, relevant, and time-based) objectives. Teachers could use this as their learning targets.



**QuipperSchool**  
PREMIUM

Teaching Guide  
**SCIENCE**

Unit 5: Electronic Structure of Matter • Grade 9

**Unit 5 | Electronic Structure of Matter**  
**Lesson 5.3: Electron Configuration**

**Learning Competencies**  
This serves as a prerequisite for the following DepEd competency:  

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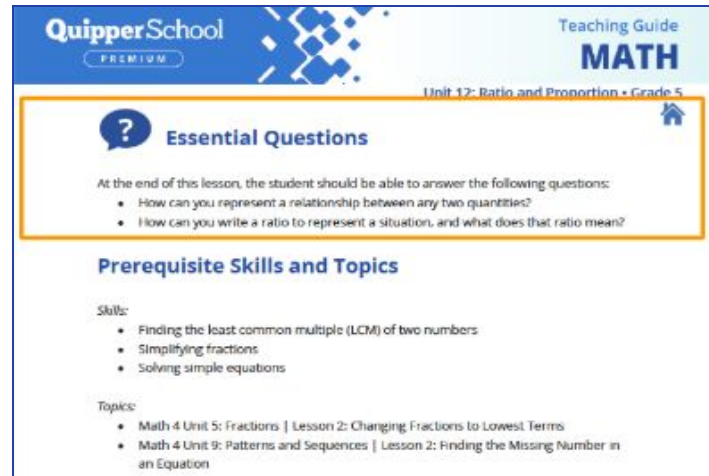
**Learning Objectives**  
At the end of this lesson, students should be able to:  

- assign quantum numbers to electrons in an atom;
- write the electron configuration of an atom; and
- draw orbital diagrams to represent the electron configuration of the atom.



## Module 2: Quipper as Instructional Materials

**Essential Questions** are probing questions to stimulate curiosity. It could guide the teachers to ask about the big ideas of the lesson.



**QuipperSchool** PREMIUM Teaching Guide **MATH**  
Unit 12: Ratio and Proportion • Grade 5

**Essential Questions**

At the end of this lesson, the student should be able to answer the following questions:

- How can you represent a relationship between any two quantities?
- How can you write a ratio to represent a situation, and what does that ratio mean?

**Prerequisite Skills and Topics**

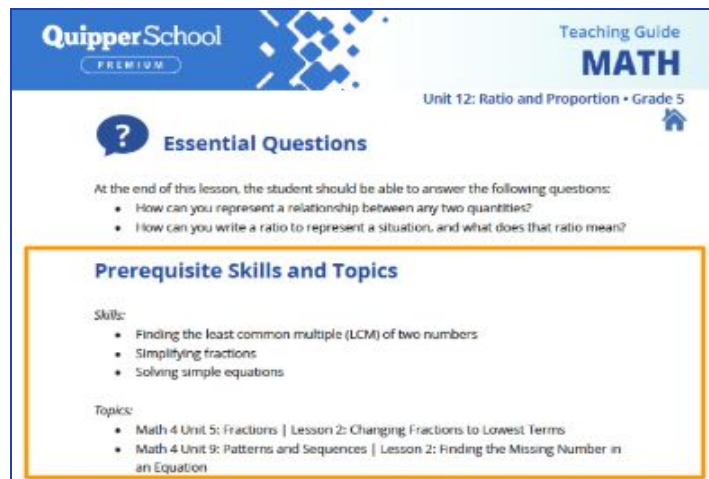
**Skills:**

- Finding the least common multiple (LCM) of two numbers
- Simplifying fractions
- Solving simple equations

**Topics:**

- Math 4 Unit 5: Fractions | Lesson 2: Changing Fractions to Lowest Terms
- Math 4 Unit 9: Patterns and Sequences | Lesson 2: Finding the Missing Number in an Equation

**Prerequisite Skills and Topics** are a list of topics available in the Quipper platform and skills that are essential for the understanding of the lesson. Teachers could assign Quipper topics in the Quipper platform as a review for the student to read the study guide and/or take quiz.



**QuipperSchool** PREMIUM Teaching Guide **MATH**  
Unit 12: Ratio and Proportion • Grade 5

**Essential Questions**

At the end of this lesson, the student should be able to answer the following questions:

- How can you represent a relationship between any two quantities?
- How can you write a ratio to represent a situation, and what does that ratio mean?

**Prerequisite Skills and Topics**

**Skills:**

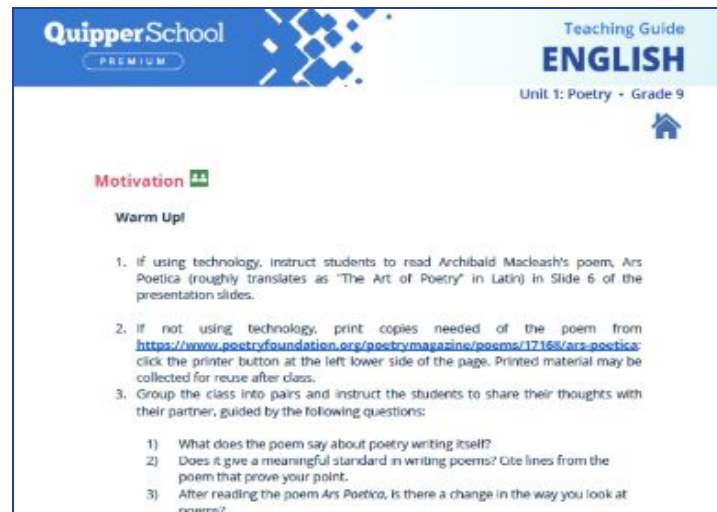
- Finding the least common multiple (LCM) of two numbers
- Simplifying fractions
- Solving simple equations

**Topics:**

- Math 4 Unit 5: Fractions | Lesson 2: Changing Fractions to Lowest Terms
- Math 4 Unit 9: Patterns and Sequences | Lesson 2: Finding the Missing Number in an Equation

### Introduction

Across all subjects, each lesson starts with an **introduction**. Depending on the subject matter, the warm-up activities could either serve as a review of prior knowledge or constructivist activity that allows students to experience the concepts prior to the discussion of the theory. These activities have guide questions and answers that the teacher may ask in class for processing.



**QuipperSchool** PREMIUM Teaching Guide **ENGLISH**  
Unit 1: Poetry • Grade 9

**Motivation**

**Warm Up**

- If using technology, instruct students to read Archibald MacLeish's poem, *Ars Poetica* (roughly translates as "The Art of Poetry" in Latin) in Slide 6 of the presentation slides.
- If not using technology, print copies needed of the poem from <https://www.poetryfoundation.org/poetrymagazine/poems/17168/ars-poetica>; click the printer button at the left lower side of the page. Printed material may be collected for reuse after class.
- Group the class into pairs and instruct the students to share their thoughts with their partner, guided by the following questions:
  - What does the poem say about poetry writing itself?
  - Does it give a meaningful standard in writing poems? Cite lines from the poem that prove your point.
  - After reading the poem *Ars Poetica*, is there a change in the way you look at poems?



## Module 2: Quipper as Instructional Materials

Since Quipper recognizes that each classroom is unique, Quipper provided several options for the teacher to choose from, depending on the class size, time, technology tools and other resources available for the teacher. The figure below shows the different icons to indicate these elements to make it easier for the teacher to choose the appropriate activity for the learning environment.

**B. Pagtalakay**

**Activity 1**

**ICONS and order ONLY when applicable**

1. groupings: individual , pair , group , collaborative learning
2. internet needed , no internet
3. with lab , without lab (kitchen based lab) (for science)
4. boardwork (use if the activity involves nothing but boardwork)
5. worksheet needed

to  
ng gawain: (Slide 7-8)

**Prostic**

3 minuto  
o, ang mga titik na bumubuo sa salita ay bibigyan o lalagyan ng  
impormasyon o konsepto tungkol sa tiyak na lokasyon ng  
babasa ng mga mag-aaral sa batayang aklat o babasahin gaya  
Study Guide.

notebook, ipatala sa bawat mag-aaral ang mga salita, konsepto, o  
tungkol sa paksa. Alternatibong salita: PILIPINAS.

The **Discussion** section provides a suggested flow on how to discuss the given topic and attain the objectives of the lesson, along with scaffolding questions that teachers can ask students to guide their thinking. In some subjects such as Science, stepwise work examples with varying difficulty levels are also provided within the lesson.

iii. Use the following as worked examples in class.

**Difficulty Levels.**

**Step 1**

**Step 2**

**Step 3**

**Step 4**

1. Write the shorthand electron configuration of aluminum

a. Identify the number of electrons for the given element. Aluminum has the atomic number 13. It has 13 electrons.

b. Fill up the maximum number of electrons per orbital according to the Aufbau principle. For aluminum (Z = 13), the 1s, 2s, 2p, and 3s orbitals will be fully filled, while among the 3p orbitals one will have a single unpaired electron.

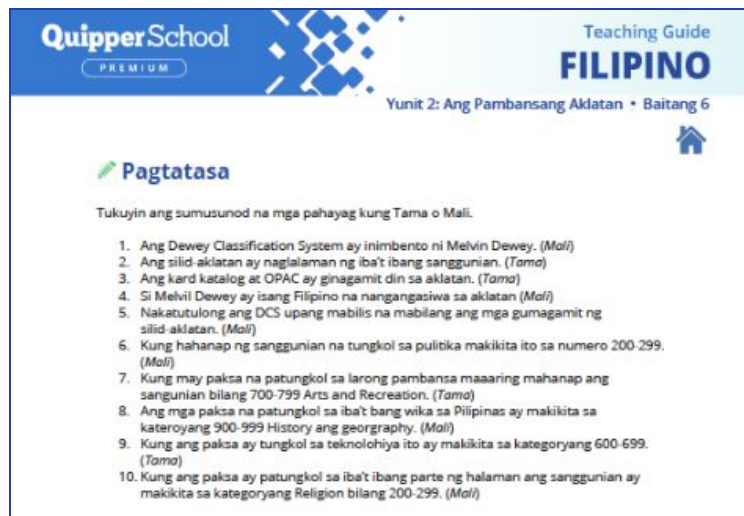
c. Identify the preceding noble gas. Substitute the electron configuration of the noble gas by writing the element symbol of the noble gas in brackets. The preceding number gas is neon. Hence, [Ne].

d. Write the electron configuration. Hence, the electronic configuration for aluminum is [Ne] 3s<sup>2</sup> 3p<sup>1</sup>.

Stepwise Solution

**Practice and Feedback** allows teachers to provide opportunities for students to try the skill on their own or apply new knowledge learned in new contexts. Teachers can also use this section to provide formative assessments if students have learned the skill or knowledge for the lesson during instruction.

**Assess Performance** is a component that allows teachers to assess if students have attained the objective(s) of the lesson. Since this can only be accessed by teachers in the platform, the answer to the exercises is provided. Difficulty levels are indicated by colored crayons.



**QuipperSchool**  
PREMIUM

Teaching Guide  
**FILIPINO**

Yunit 2: Ang Pambansang Aklatan • Baitang 6

**Pagtatasa**

Tukuyin ang sumusunod na mga pahayag kung Tama o Mali.

1. Ang Dewey Classification System ay inimbento ni Melvin Dewey. (Mali)
2. Ang silid aklatan ay naglalaman ng iba't ibang sanggunian. (Tama)
3. Ang kard katalog at OPAC ay ginagamit din sa aklatan. (Tama)
4. Si Melvil Dewey ay isang Filipino na nangangasiwa sa aklatan (Mali)
5. Nakatutulong ang DCS upang mabilis na mabilang ang mga gumagamit ng silid aklatan. (Mali)
6. Kung hahanap ng sanggunian na tungkol sa pulitika makikita ito sa numero 200-299. (Mali)
7. Kung may paksa na patungkol sa larong pambansa maaaring mahanap ang sanggunian bilang 700-799 Arts and Recreation. (Tama)
8. Ang mga paksa na patungkol sa iba't bang wika sa Pilipinas ay makikita sa kateroyang 900-999 History ang geography. (Mali)
9. Kung ang paksa ay tungkol sa teknolohiya ito ay makikita sa kategoryang 600-699. (Tama)
10. Kung ang paksa ay patungkol sa iba't ibang parte ng halaman ang sanggunian ay makikita sa kategoryang Religion bilang 200-299. (Mali)

Each lesson ends with a **synthesis**. These are suggested questions that teachers can ask students that lead to teachers' synthesis of the lesson. These questions are related to the big ideas of the lesson. Depending on the subject matter, questions involve valuing and/or real-world applications.

### Other Features of the Teaching Guide

Other features of the teaching guide are Web Box and Bibliography. The **Web Box** contains some suggested activities on ICT integration involving the use of either Web 1.0 or Web 2.0 tools to enrich student understanding of the content. The **bibliography** contains references used in the creation of the teaching guide.

#### Kasanayan sa ICT

Maaaring itong ipagawa bilang dagdag na Kasunduan:

Para sa karagdagang impormasyon at paghahanda para sa susundo na aralin, ipanood sa mga mag-aaral ang video na ito at sabihing isulat sa kanilang kuwaderno ang kanilang natutuhan sa napanood na video.

"Absolute Location - Latitude and Longitudes Demonstration" ni Tyler Bolstad

<https://www.youtube.com/watch?v=V2hPhPlik-Y>

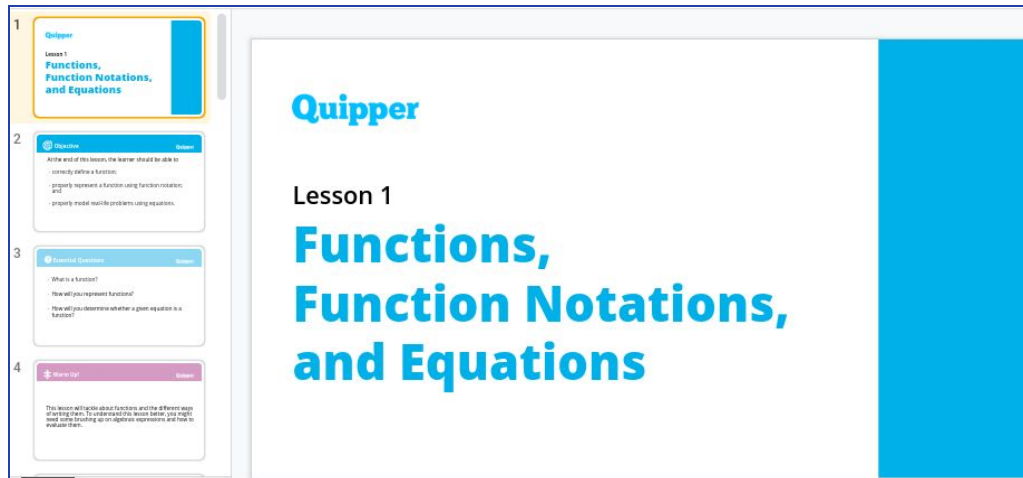


### Try It

Study the [sample teaching guide](#) attached. What are the components of the teaching guide? How are they different from your lesson plans

### Editable presentation slides

Aside from the teaching guides, the Teachers' Content also provides you with **editable presentation slides** for all subjects. These slides are on Google Slides format so that teachers can copy, customize as their own and use it in class.



### Try It

Study the attached sample editable presentation slides. See how they are different from each subject and how they can be used inside the classroom.

- [English](#)
- [Math](#)
- [Science](#)
- [Filipino](#)
- [Araling Panlipunan](#)

### Worksheets

For Math and Science, three types of **worksheets** with varying difficulty levels are available per lesson. Each worksheet corresponds to the three levels in Bloom's Taxonomy. The teacher may use all the worksheets or choose one depending on the time and the current skill level of students.

Teaching Guide  
**MATH**  
Unit 1: Sets • Grade 7

**Worksheet I**

**Easy**  
**Worksheet I**

A. Write the following sets in roster form. (6 pts)

- Set  $A$  is the set of all consonants in the word QUIPPER.  
\_\_\_\_\_
- Set  $B$  is the set of all positive even integers below 17.  
\_\_\_\_\_
- Set  $C$  is the set of prime numbers less than 20.  
\_\_\_\_\_

B. Write the following sets in set-builder form. (6 pts)

- $A = \{a, e, l, o, u\}$   
\_\_\_\_\_

Teaching Guide  
**MATH**  
Unit 1: Sets • Grade 7

**Worksheet II**

**Average**  
**Worksheet II**

A. Write the following sets in roster form. (6pts)

- Set  $A$  is the set of all consonants in the word PHILIPPINES.  
\_\_\_\_\_
- Set  $B$  is the set of all positive odd integers below 17.  
\_\_\_\_\_
- Set  $C$  is the set of prime numbers less than 30.  
\_\_\_\_\_

B. Write the following sets in set-builder form. (6 pts)

- $A = \{a, b, c, d, e\}$   
\_\_\_\_\_

Teaching Guide  
**MATH**  
Unit 1: Sets • Grade 7

**Worksheet III**

**Difficult**  
**Worksheet III**

A. Write the following sets in roster form. (6 pts)

- Set  $A$  is the set of all consonants in the word MATHEMATICS.  
\_\_\_\_\_
- Set  $B$  is the set of all positive even integers less than or equal to 30.  
\_\_\_\_\_
- Set  $C$  is the set of composite numbers less than 40.  
\_\_\_\_\_

B. Write the following sets in set-builder form. (6 pts)

- $A = \{\text{Emilio Aguinaldo, Manuel Quezon, Jose Laurel, Sergio Osmena, Manuel Roxas}\}$   
\_\_\_\_\_

### Literary texts

In **English**, **additional literary texts** are provided which the teacher can print and reproduce in class. English teachers can use this resource as supplementary reading material, or as an alternative text for class discussion or assessments.

### Resource Slide

These are additional links, references that teachers can use in organizing their lessons.



### Additional Resource Link(s)

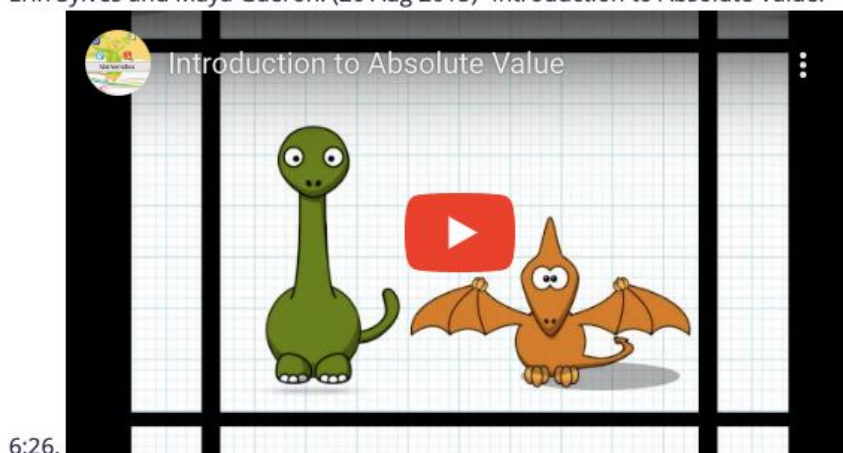
For further discussion about sets representation, visit the following web page: "[Representation of a Set](#)". Math Only Math. Retrieved 13 January 2019.



### Additional Resource Link(s)

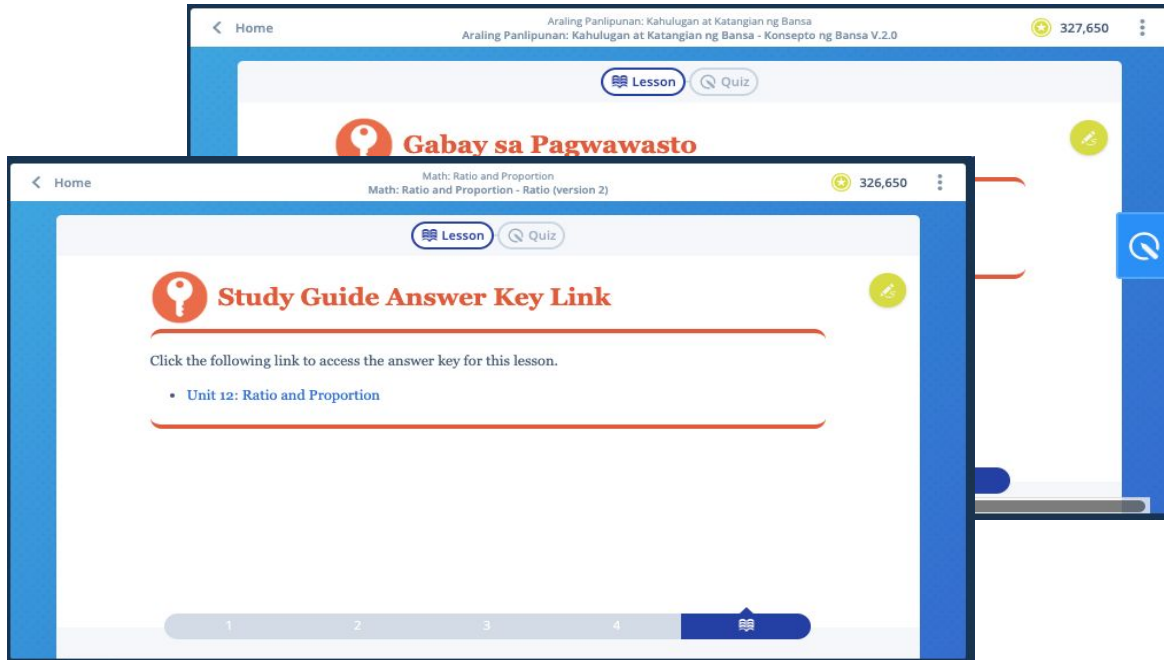
For more discussion about absolute values, you can check on the following links:

- Stapel, Elizabeth. "[Absolute Value](#)." Purplemath. Retrieved 5 February 2019
- Erin Sylves and Maya Gueron. (20 Aug 2015) "Introduction to Absolute Value." Youtube Video,



### Answer key to the study Guide

These are the answer keys to the Study guide of the specific Unit.

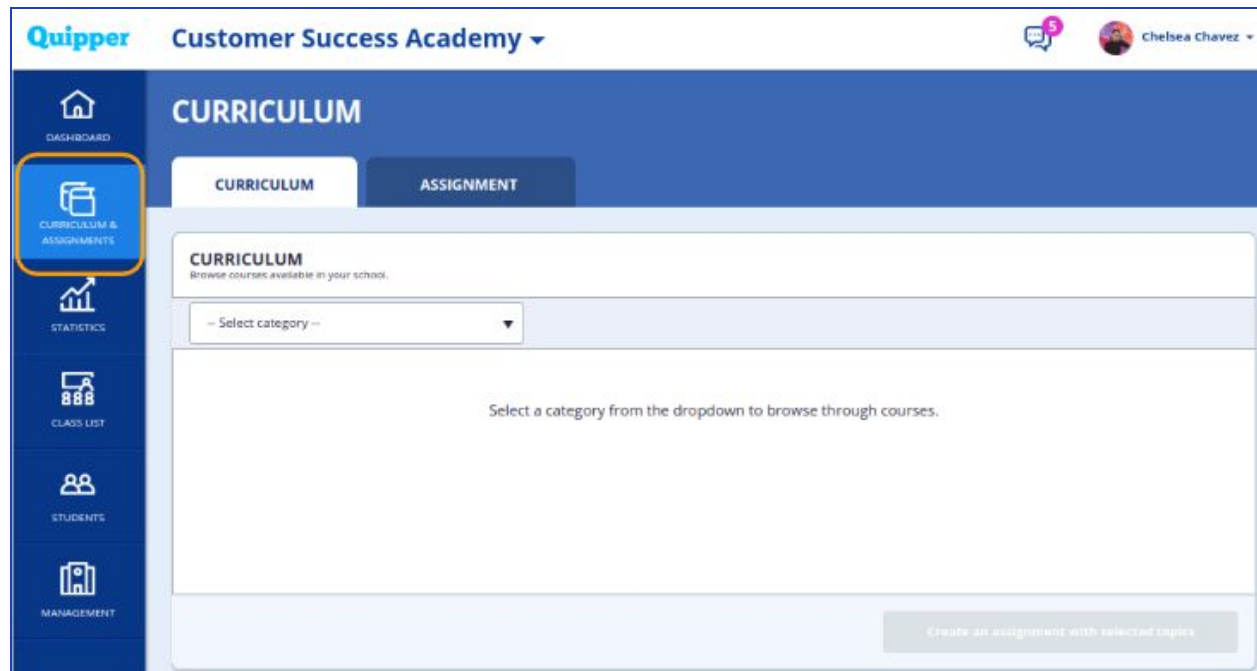


For ease of use, the teaching guides, link to the presentation deck, worksheets and literary texts can be all be found in one place--Quipper slides. Additional resource slides are also provided for all subjects to (1) make it easier for the teachers to access all the components of the package and (2) to provide additional resources for teachers' enrichment. Let's quickly go through each slide in Quipper viewed from Q-Learn.

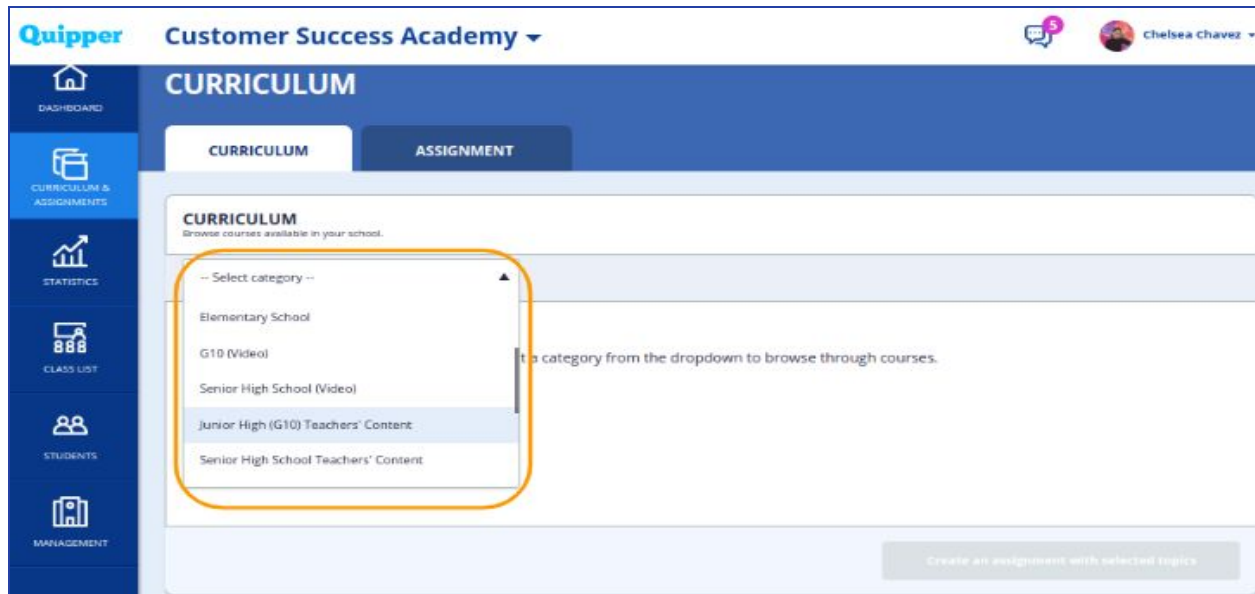
### Accessing Teachers' Content in the Q-Link Platform

1. In the five main tabs, choose 'Curriculum and Assignments'.



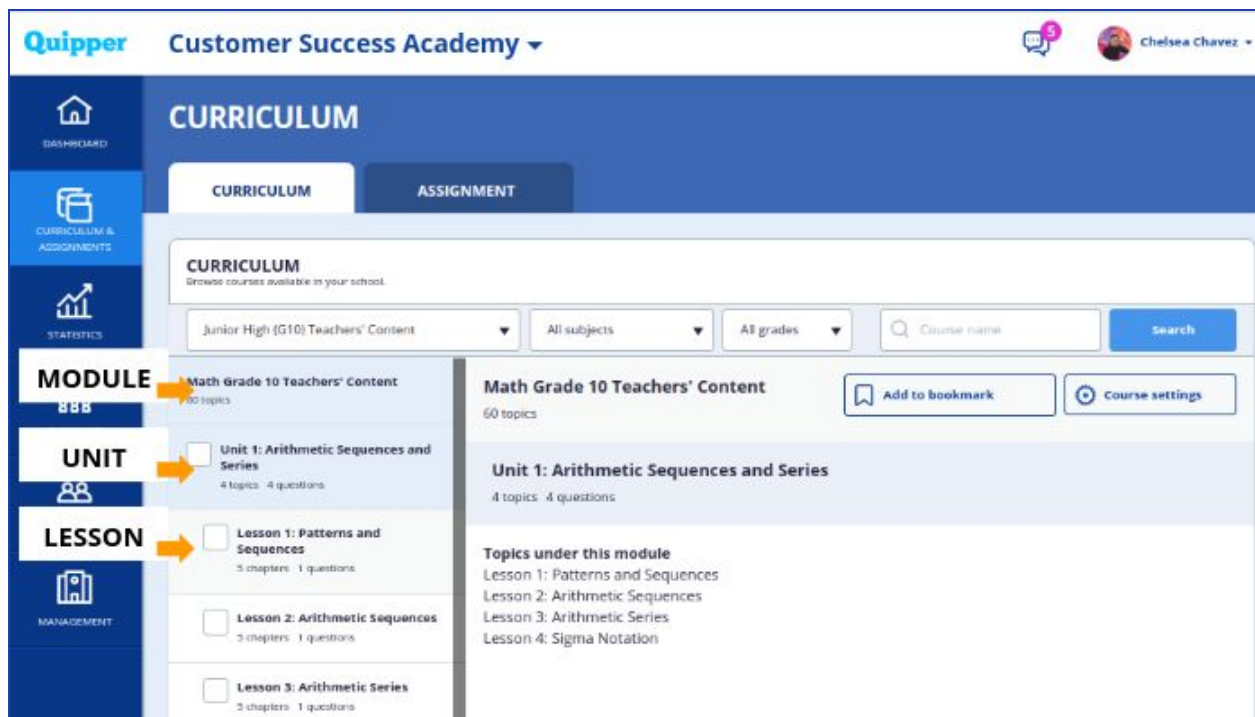


2. Under the category list, choose a course with 'Teachers Content'.



Example: Junior High (G10) Teachers' Content

3. Then choose a 'Module', 'Unit' and specific 'Lesson'





## Module 2: Quipper as Instructional Materials

4. After choosing a specific 'Lesson', click the lesson slide number below to see the 'Resource Slides'.

The screenshot shows the Quipper Customer Success Academy interface. On the left is a sidebar with navigation icons for Curriculum & Assignments, Statistics, Class List, Students, and Management. The main content area is titled 'CURRICULUM' and shows a list of units and lessons. The selected unit is 'Unit 1: Arithmetic Sequences and Series, Math Grade 10 Teachers' Content'. The selected lesson is 'Lesson 1: Patterns and Sequences'. The 'Learning Objectives' section is highlighted, showing the goal: 'At the end of the lesson, the learner should be able to' followed by a list of objectives: 'correctly generate and illustrate patterns;', 'accurately identify the next term in a given pattern; and', and 'correctly find the general rule for the  $n$ th term of a sequence.' Below the objectives is a 'Report errors' button and a row of lesson slide numbers (1, 2, 3, 4, 5) with slide 1 selected.

5. Lastly, click the link to see the resources.

The screenshot shows the Quipper Customer Success Academy interface. On the left is a sidebar with navigation icons for Curriculum & Assignments, Statistics, Class List, Students, and Management. The main content area is titled 'CURRICULUM' and shows a list of units and lessons. The selected unit is 'Unit 1: Arithmetic Sequences and Series, Math Grade 10 Teachers' Content'. The selected lesson is 'Lesson 1: Patterns and Sequences'. The 'Teaching Guide Link' section is highlighted, showing the link: 'Lesson 1: Patterns and Sequences'. Below this is the 'Worksheets' section, showing the links: 'Worksheet I', 'Worksheet II', and 'Worksheet III'. Below the worksheets is a 'Report errors' button and a row of lesson slide numbers (1, 2, 3, 4, 5) with slide 1 selected.



### Try It

Navigate your Q-Link platform and try to look for the following:

1. Teaching Guide of G10 Science: Tectonic Plates
2. Presentation Slide of SHS Oral Communication: Definition and Process of Communication
3. Recall Worksheet of G7 Science: The Scientific Method



### Check Your Understanding

A. Match the following parts of the 'Downloadable Teaching Guide' in Column B with its description in Column A by writing the letter of the correct answer on the blanks provided.

#### Column A

\_\_\_\_ 1. contains additional exercises meant to assess if students have attained the objective(s) of the lesson

\_\_\_\_ 2. list of topics available in the Quipper platform and skills that are essential for the understanding of the lesson

\_\_\_\_ 3. probing questions to stimulate curiosity

\_\_\_\_ 4. serves as a motivation to recall prior to the lesson discussion

\_\_\_\_ 5. contains suggested activities for teachers on ICT integration

#### Column B

a. Pre-requisite Topics

b. Essential Question

c. Assess Performance

d. Web Box

e. Introduction

## Module 2: Quipper as Instructional Materials

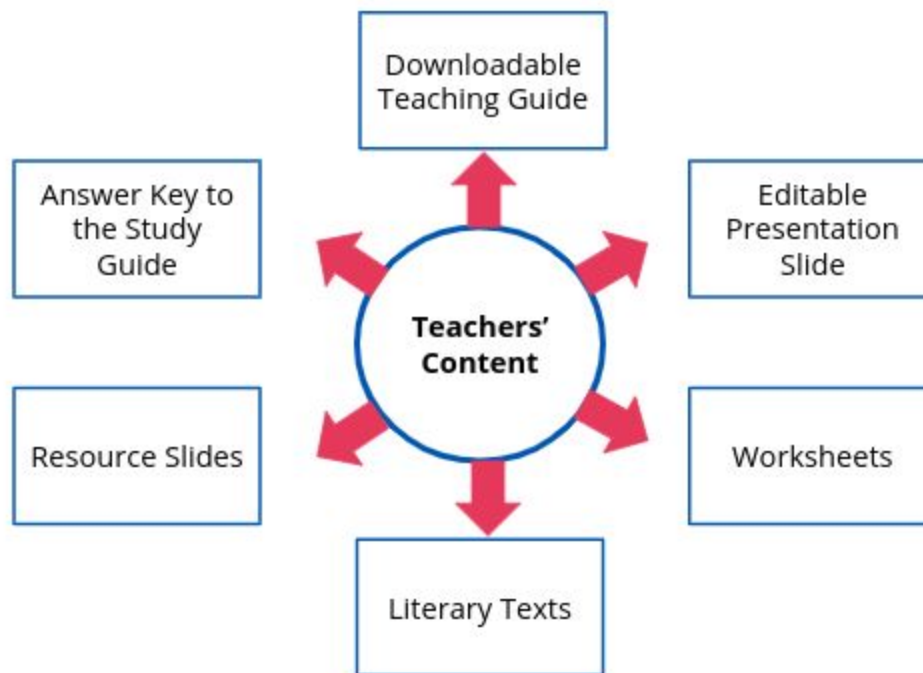
B. Reflecting on the current subject you are Teaching. Choose at least two or more parts of the Teacher's Guide and explain how you can integrate it into your lesson plan. (5 points)

[Link to Essay](#) 



### Wrap Up

**Teachers' Content** is a one-stop-shop for teachers in need of resources for Math, Science, English, Araling Panlipunan, and Filipino.



### Bibliography

<https://online.purdue.edu/blog/what-is-instructional-design>

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[https://www.niu.edu/facdev/\\_pdf/guide/learning/gagnes\\_nine\\_events\\_instruction.pdf](https://www.niu.edu/facdev/_pdf/guide/learning/gagnes_nine_events_instruction.pdf)

<https://studylib.net/doc/7883124/sample-ubd-lesson-plan-template>

<https://www.humber.ca/centreforteachingandlearning/assets/files/Teaching%20Methods/4A%20of%20Lesson%20Planning.pdf>

<https://nasaclips.arc.nasa.gov/teachertoolbox/the5e>

[https://www.niu.edu/facdev/\\_pdf/guide/learning/gagnes\\_nine\\_events\\_instruction.pdf](https://www.niu.edu/facdev/_pdf/guide/learning/gagnes_nine_events_instruction.pdf)

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[https://www.ascd.org/ASCD/pdf/siteASCD/publications/UbD\\_WhitePaper0312.pdf](https://www.ascd.org/ASCD/pdf/siteASCD/publications/UbD_WhitePaper0312.pdf)

<https://nasaclips.arc.nasa.gov/teachertoolbox/the5e>