

# Technology-Enhanced Learning - Activity Plan

## Set theory

**Name:** Md Ausafur Rahman

**Grade / Course:** *Mathematics 9*

**Length of Activity:** *60 minutes*

### Lesson Summary:

Students will denote set, classification of set, component of set and solution of set related problem using set theory. This is explain using powerpoint presentation and group work.

### Lesson Objective:

To provide students with an opportunity to learn set theory, using set theory solve some set related problem and various operation of set theory.

### Resources/Technology – Teacher

Interactive Whiteboard

Online Resources, OER's

Social media

Multimedia content and Projector

Online Resources

- <https://www.britannica.com/topic/set-theory>
- <https://brilliant.org/wiki/set-theory/>
- [https://en.wikibooks.org/wiki/Discrete\\_Mathematics/Set\\_theory](https://en.wikibooks.org/wiki/Discrete_Mathematics/Set_theory)

### Resources/Technology – Students

Computer Lab or Student Laptop setting

personal access to the Internet

Worksheet/ Learning Materials

Social media

Online Resources

- [https://www.mathgoodies.com/lessons/toc\\_unit15](https://www.mathgoodies.com/lessons/toc_unit15)
- <https://www.aare.edu.au/publications-database.php/1614/an-interactive-approach-to-the-teaching-of-set-theory-in-the-mathematics-classroom>
- <http://www.mbacrystalball.com/blog/2015/10/09/set-theory-tutorial/>

### Intended Learning Outcomes

- Students will define set.
- Students will operate set related problem.
- Students will do union and intersection of two set with ven diagram.

### Instructional Activities

The facilitator will review and present materials using interactive whiteboard and multimedia projector examples to the whole class. (15 minutes)

Teacher to provide instructions on how to solve set related problem and the web links to the resources provided to students. (15 minutes)

Students are given time to complete the lesson activities. (30 minutes)

**Learner Assessment**

Student will solve some set related problem like the follows:

If A, B, C are three sets, Proof  $(A \cup B) \cap C = (A \cap C) \cup (B \cap C)$