STEMS ROBOTICS PBL LESSON PLAN

Lesson 7:- Loops

**DURATION:**  72 mins

**OUTCOMES:**-

MA4-1WM Communicates and connects mathematical ideas using appropriate terminology, diagrams and symbols

MA4-2WM Applies appropriate mathematical techniques to solve problems

MA4-3WM Recognises and explains mathematical relationships using reasoning

SC4-WS6 A student follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually

SC4-WS7.1 Students process data and information by:

a. summarising data from students’ own investigations and secondary sources (ACSIS130, ACSIS145)

e. applying simple numerical procedures, eg calculating means when processing data and information, as appropriate

SC4-WS7.2 Students analyse data and information by:

d. using scientific understanding to identify relationships and draw conclusions based on students’ data or secondary sources (ACSIS130, ACSIS145)

**BIG IDEA**:- Students will learn how to program their robot to perform repeating actions (Loops).

**Activities:-**

1. Work through the Loops Powerpoint through to slide 4
2. Hand out the challenge worksheets.
3. Students work at own pace through Loops Challenge. Facilitation from teacher.
4. Post challenge:- Challenge Solution (Slide 7).
5. Should time allow move on to the optional Lego Lessons.
6. Close lesson

**Reflection/Homework/Evaluations**

Discuss how students may be able to use loops in their design.

**Do Now**