



Department of Provincial Education Sabaragamuwa – Sathi Pasala

Subject - Science

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Grade-9

Week - 06

Topic – Simple machine

Lesson – Inclined planes

*At the end of this study you will,

- Introduce inclined plane as a simple machine.
- Present a simple activity for it.
- Note some instances where inclined planes are used in day to-day life.
- How mechanical advantage of the inclined planes change with the angle of the inclined plane, will show as an activity.

*First read the first paragraph of page number 93 in grade nine text book part ii. Then consider the following questions and put ✓ mark if it is correct and put × mark if it is wrong.

1. Inclined planes can be used to facilitate the work. Because they are type of simple machines. ()
2. To up-lift an object, should apply a force which is equal to the weight of the object. ()
3. When taking an object up-ward along the inclined plane, the effort will be less than the weight of the object. ()

*Then, do the activity 15.2.

**According to that identify the effort is changed according to the angle.

According to that,

The effort increase when increasing the angle of inclined plane and effort decrease when decreasing the angle of inclined plane. According to that the mechanical advantage also increase.

*Read page number 93, and

1. Write down some instances where inclined planes are used in day to-day life.
2. Then read the first paragraphs of page number 94 and 95. Then practice the calculation with six steps by writing. If you can, change the values of the above calculation and practice again. (Weight 800N, the length of the inclined plane is 6m and the height 2m)

