

You have just been appointed the Pharaoh's Royal Architect! The Pharaoh has directed you to build a great pyramid that will cause all who view it to gasp in wonderment and awe. You will need to be an expert on the topics of the Engineering Design Process and Simple Machines to fulfill the Pharaoh's wishes..

Daily Schedule:

Day 1: Today you will investigate simple machines.

- a. Go through the google slides presentation: [Simple Machines](#)
- b. [Watch this Edpuzzle Video](#)
- c. Print and complete: [Simple Machines Scavenger Hunt](#) (*If you cannot print do your work on another piece of paper*)

Day 2: Ancient Egypt and Simple Machines

- a. Watch: [How Pyramids Were Built](#)
- b. Go to Tinkercad. [TinkerCad](#)
 - i. Using only blocks, create a square pyramid with a base surface area of 16.
 - ii. Continue to create smaller and smaller layers until you have a pyramid with only one block at the top.
 - iii. Using the measurement tool find the volume of your pyramid.
 - iv. Share your pyramid and volume with your teacher.

Day 3: Have fun with Simple Machines

- a. Play: Quizlet for 10 minutes: [Simple Machines Quizlet](#)

Day 4: Design a Simple Machine

- a. Watch: a video of the Engineering Design Process: [Design Process](#)
- b. Goto Tinkercad: [TinkerCad](#)
 - i. Try to make 3d Models of three different simple machines
 1. A lever and a fulcrum
 2. A pulley
 3. A Wheel and Axle
 - ii. Share your models with your teachers

Day 5: Build and Test a Simple Machine

- a. Using the Engineering Design Process and materials you can find at home:
 - i. Reference Sheet: [Design Process and Simple Machines](#)
 - ii. Create a simple machine
 - iii. Test your simple machine following the steps on the Reference Sheet
 - iv. Make a video of your simple machine in action.
 1. Upload your video to Flipgrid using the following code:
 - a. [Simple Machines Flipgrid](#)