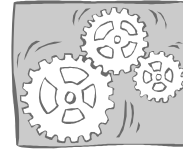


EXPLORING MECHANISMS



Name: _____ Rotation #: _____ Hour Code: _____ Date: _____
Name: _____

Lesson 2 –

Inclined Plane exercise. Show instructor your setup and explain.

Instructor's Initials: _____

LESSON 3-

DO NOT SWITCH ANY OF THE SCREWS IN THE PIECES, EVER!

FIRST CLASS LEVER ACTIVITY AND EXERCISE. Use the holes that are described in the “written” directions not the holes they describe in the “video clip”. Otherwise, your answers will be wrong when you answer the questions. Show & explain exercise to the Instructor.

Instructor's Initials: _____

LESSON 4

SECOND CLASS/ THIRD CLASS LEVER. Show and Explain.

Instructor's Initials: _____

Describe a Second Class Lever? Give one example of a 2nd class lever used in real life.

Describe a Third Class Lever? Give one example of a 3rd class lever used in real life.

Complete the **Environmental Impacts** paragraph on a separated sheet of paper and staple to the back of the worksheet.

LESSON 5

Explain the exercise: what you did in this exercise, what happened, and what you learned about wheel and axles:

LESSON 6

Explain the exercise: what you did in this exercise, what happened, and what you learned about pulleys:

LESSON 7

Explain the "SCREW EXERCISE":

Instructor's Initials: _____

GEAR EXERCISE- (part2) Shown to Instructor

Instructor's Initials: _____

Career Research

What career do your interests place you into this "physical technologies" field?

EXTRA CREDIT-- The following Lessons are extra credit unless directed otherwise by the instructor. They may be added for regular credit.

LEVEL 2is

LESSON 5-FRICTION BELT DRIVE EXERCISE-

Show to the instructor.

Instructor's Initials: _____

LESSON 9-READ THE INFORMATION & DO THE EXERCISE—

Show to the instructor

Instructor's Initials: _____

EXPLORING MECHANISMS NOTES

Take notes at this module!!!!

Equipment- Ask instructor for specific equipment / materials needed in each lesson

LESSON 1

READ TECHNOLOGY TEXTBOOK: "DESIGNING MECHANICAL SYSTEMS" P.120-124

LESSON 2

INCLINED PLANE ACTIVITY AND EXERCISE. **Input force** is the measured weight of the block, the **Output force** is the reading on the scale when you pull it. The "INPUT" and "OUTPUT" forces are done like this in just about every experiment. Always pay close attention to which device is the input force and which device is the output force. This is the only way to do well on the "Exercises".

LESSON 3

DO NOT SWITCH ANY OF THE SCREWS IN THE PIECES. Since the threads on the screws are different types switching them may result in damage. If you find any of the screws missing let the instructor know immediately. They will fix the problem.

FIRST CLASS LEVER ACTIVITY AND EXERCISE. Use the holes it talks about in the "written" directions not the holes it shows you in the video (they are wrong). You won't get the right answers to the exercise if you use the wrong holes. Show & explain it to the Instructor.

LESSON 4-SECOND CLASS/ THIRD CLASS LEVER. Use 4.45 Newton's as the force of the 1 lb. Weight
Environmental Impacts Response – on a separate sheet of paper, write a response to this question.

How do the environmental impacts you just learned about effect your community?

LESSON 5

WHEEL AND AXLE ACTIVITY AND EXERCISE—Be sure to use 4.45N as the force of the 1.0 lb. Weight.

LESSON 6 PULLEY ACTIVITY AND EXERCISE,

LESSON 7 SCREW ACTIVITY AND EXERCISE

GEAR EXERCISE--**Show and explain** this to the instructor.

The following Lessons are to be done upon completion of the required seven lessons in Level 1.

LEVEL 2 is-

LESSON 5- FRICTION BELT DRIVE EXERCISE--Show to the instructor

LESSON 9- READ THE INFORMATION & DO THE EXERCISE--Show to the instructor

DAILY LOG

- Fill out at the end of each day. 2 points per day

Day	Date	Lessons	Describe what you learned
Mon			
Tues			
Wed			
Thurs			
Fri			