

Exploring Mechanical Systems

Your goal is to learn everything you can about how mechanical systems work. In groups, you will become experts and will be responsible for learning a component of mechanical systems and teaching it to the rest of team.

Task:

1. One of the mechanical systems below will be assigned to your group to research.
2. Your researched system must be written on the poster paper provided.
3. You are responsible for planning and teaching a lesson to the rest of the team on your mechanical system with a working model.
4. The lesson should be no more than 15 min in length.

Mechanical Systems:

- | | | |
|--|--|--|
| <input type="checkbox"/> Pulley | <input type="checkbox"/> 3rd class lever | <input type="checkbox"/> Technical Manuals |
| <input type="checkbox"/> Wedge | <input type="checkbox"/> Ergonomics | <input type="checkbox"/> Inclined Plane |
| <input type="checkbox"/> 1st class lever | <input type="checkbox"/> Wheel and axle | <input type="checkbox"/> Hydraulics |
| <input type="checkbox"/> 2nd class lever | <input type="checkbox"/> Gears | <input type="checkbox"/> Pneumatic |

*Use the following checklist to help you prepare for your lesson. Remember that the rest of the team has not researched your mechanical system. Therefore all necessary information must be present to ensure a successful lesson.

Try to be creative by involving the class, using the overhead or blackboard, providing handouts, asking for volunteers, creating a quiz for understanding, planning a learning activity, etc ...

Check off when Completed ✓	Presentation Checklist
<input type="checkbox"/>	Definition of mechanical system
<input type="checkbox"/>	Diagram of mechanical system
<input type="checkbox"/>	Working model of mechanical system
<input type="checkbox"/>	Step by step explanation of how system works
<input type="checkbox"/>	Examples of mechanical systems (real life examples)
<input type="checkbox"/>	Examples of calculations of Force, Work, Mechanical Advantage. Mechanical Efficiency

FULL Name: _____

DUE Date: _____

Learning All About Mechanical Efficiency

Name of YOUR Mechanical System	
Definition of Mechanical System	
Diagram of Mechanical System	
Description of How it Works	
Real Life Examples	
Calculations _ Force _ Work _ Mechanical Advantage _ Mechanical Efficiency	

Name of Mechanical System	
Definition of Mechanical System	
Diagram of Mechanical System	
Description of How it Works	
Real Life Examples	

FULL Name: _____

DUE Date: _____

Name of Mechanical System	
Definition of Mechanical System	
Diagram of Mechanical System	
Description of How it Works	
Real Life Examples	

Name of Mechanical System	
Definition of Mechanical System	
Diagram of Mechanical System	
Description of How it Works	
Real Life Examples	