

# WELCOME TO THE ONLINE CLASS

**SESSION NO.: 17**

**CLASS: 5**

**SUBJECT: SCIENCE**

**CHAPTER NUMBER: 11**

**CHAPTER NAME: FORCE AND ENERGY**

**SUB TOPIC: SIMPLE MACHINES- THE WHEEL AND AXLE, THE  
SCREW**

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**CHANGING YOUR TOMORROW**

# LEARNING OBJECTIVE

**To enable the learner to:**

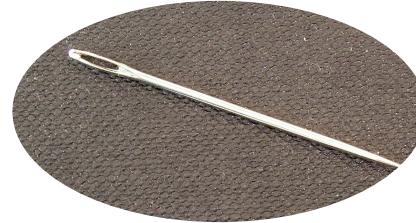
- **understand about machines.**
- **identify the types of simple machines commonly used.**
- **understand the importance of machines in real life.**

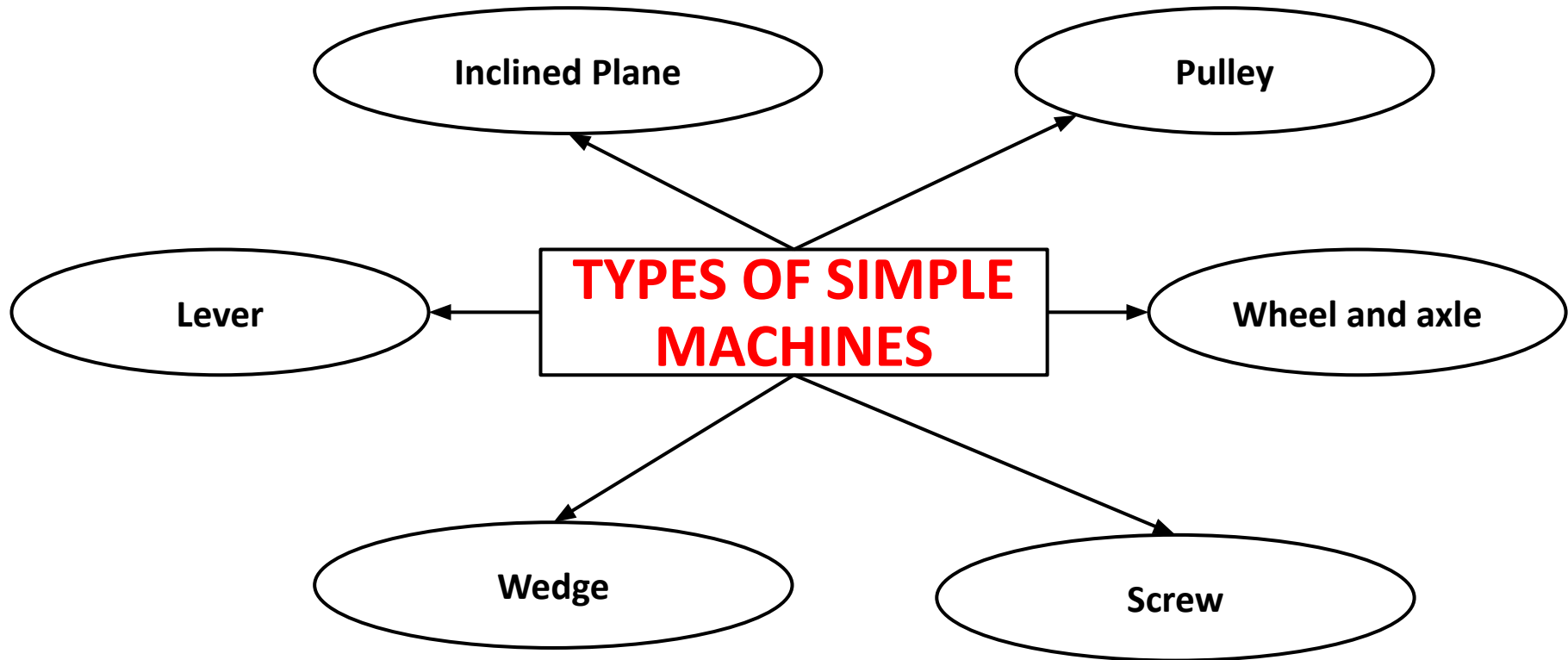
# LET'S RECAP

- \_\_\_\_\_ are tools that make our work easier and faster.
- Simple machines change the \_\_\_\_\_ of applied force.
- The upward push of water on a floating object.
- The class of lever in which fulcrum is in the middle.
- Steering wheel is an example of which type of simple machine?

# SIMPLE MACHINES

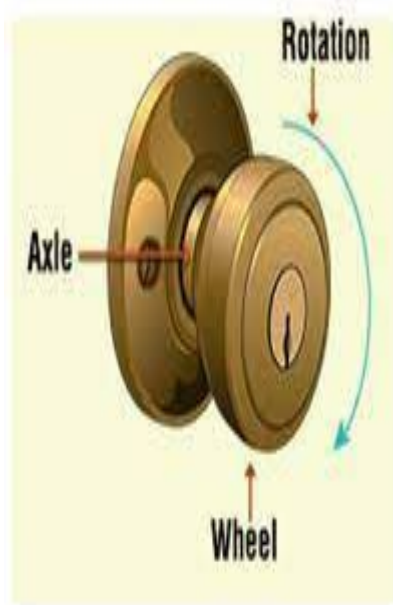
- Tools which make our work easier and faster are called machines.
- Simple machines help us to do work by applying force at a convenient point which either changes the direction of force or increases the force applied.





# WHEEL AND AXLE

- A wheel with a rod attached to it is known as a wheel and axle.
- This arrangement is used in big machines.



# SCREW

- A screw is a simple machine used to hold things tightly.
- A screw is actually an inclined plane wrapped around a rod.
- Screw is a nail with grooves around it.
- Biggest screws, called screw jacks, are used to lift cars and other heavy objects.



# SCREW BETTER THAN A NAIL

- When we join things together with the screw they are held together through a longer distance and thus cannot be forced apart easily. On the other hand, when we join things with the nail they are held together only for a short distance, that is through the length of the nail. That is why a screw is better than a nail.





# WEDGE

- A wedge is an object with one pointed edge and one thick edge.
- It is actually two inclined planes joined together.
- It is used to cut things.



# SUMMARY

- **Tools which make our work easier and faster are called machines.**
- **Simple machines help us to do work by applying force at a convenient point which either changes the direction of force or increases the force applied.**
- **A wheel with a rod attached to it is known as a wheel and axle.**
- **A screw is actually an inclined plane wrapped around a rod.**
- **Screw is a nail with grooves around it.**
- **A wedge is an object with one pointed edge and one thick edge.**
- **It is actually two inclined planes joined together.**

READY FOR A  
**QUIZ** ?

1. A \_\_\_\_\_ is a simple machine used to hold things tightly together.

**Ans: Screw**

**2. Egg-beater is an example of**

**\_\_\_\_\_.**

**Ans: Wheel and axle**

**3. Needle is an example of \_\_\_\_\_.**

**Ans: Wedge**

# **HOMEWORK**

**Learn Ch-9.**

# LEARNING OUTCOME

**The learner will be able to:**

- **understand about machines.**
- **identify the types of simple machines commonly used.**
- **understand the importance of machines in real life.**



**THANKING YOU**  
**ODM EDUCATIONAL GROUP**