



**Srini Science Mind**  
Abdul Kalam Physical Science Group



**NEW**

**8<sup>th</sup> class**

**PHYSICAL SCIENCE**

**MODEL LESSON PLAN**



**M.SRINIVASA RAO, SA(PS) AGKMHS GUDIVADA PH: 9848143855**

# MODEL LESSON PLAN

CLASS: 08

SUBJECT: PS

Name of the Teacher: M.SRINIVASA RAO

Name of the School: A.G.K.M.H.School, Gudivada

Name of the Lesson/Unit	Topic	No.of Periods Required	Timeline for teaching		Any specific information
			From	To	
FORCE AND PRESSURE	Force- A push or pull	2	xx/xx/xxxx	xx/xx/xxxx	
	Forces are due to an interaction	1	xx/xx/xxxx	xx/xx/xxxx	
	Exploring forces	2	xx/xx/xxxx	xx/xx/xxxx	
	A force can change the state of motion	2	xx/xx/xxxx	xx/xx/xxxx	
	Force can change the shape of an object	2	xx/xx/xxxx	xx/xx/xxxx	
	Contact forces Muscular force	2	xx/xx/xxxx	xx/xx/xxxx	
	Non-contact forces Magnetic force	2	xx/xx/xxxx	xx/xx/xxxx	
	Pressure	2	xx/xx/xxxx	xx/xx/xxxx	
	Pressure exerted by liquids and gases	2	xx/xx/xxxx	xx/xx/xxxx	
	Atmospheric pressure	1	xx/xx/xxxx	xx/xx/xxxx	

## Prior Concept/Skills:

1. When do objects move from the rest position?
2. What type of action need to open your house door?
3. How do fielders stop a ball hit by a batsman?
4. Why does the shape of the toothpaste tube change when we squeeze it?

## Learning Outcomes:

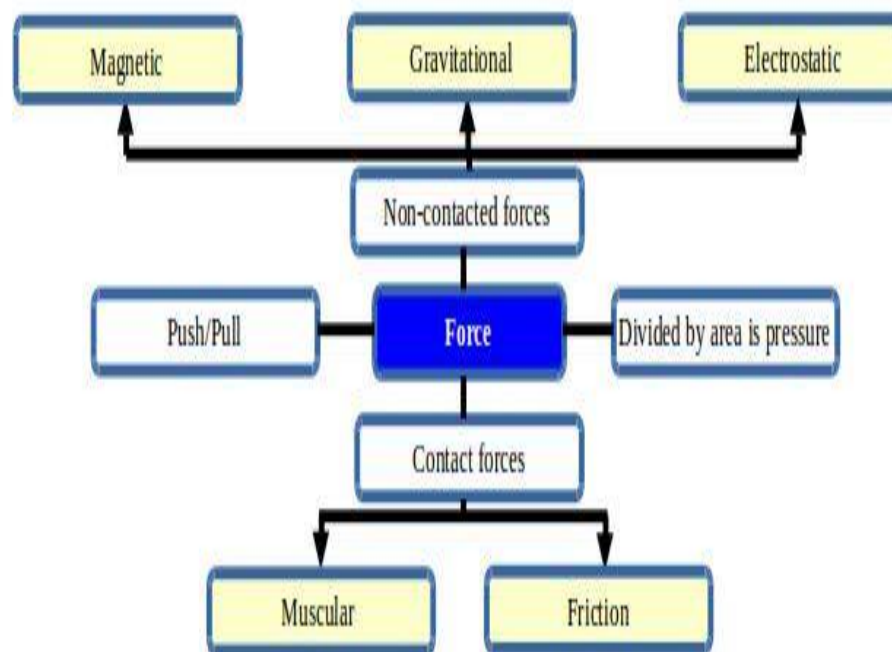
1. Classifies situations based on applied force whether it is pushed or pulled.
2. Differentiate materials of contact and non-contact forces.
3. Flow chart of types of forces.
4. Measure the net force on the system/object
5. Conduct a simple investigation to seek answers to queries about when a body is dropped from a building, the speed of the falling body increases.
6. Writes word equation for pressure.
7. Relates process with causes of the area of contact depending on the pressure.
8. Relates processes and phenomenon with causes why is cutting edge of knife made sharper.
9. Measure the atmospheric pressure
10. Conduct a simple investigation to seek answers to queries about Do liquids exert equal pressure at the same depth?
11. Applies to learning of scientific concepts in the day-to-day life of pressure situations
12. Discusses and appreciates stories of scientific discoveries of Otto von Guericke.

## No. of Periods

- 2
- 2
- 2
- 2
- 2
- 2
- 1
- 1
- 1
- 1
- 1
- 1

## TEACHING LEARNING PROCESS

### Induction/Introduction:



### Experience and Reflection:

1. Students are uses the different types of forces in our daily life and Identify the types of force with situations.
2. Students collect the information of atmospheric pressure
3. Observe the filling of air into the vehicle tyres and collect the data of how much air pressure is needed for the vehicles.
4. Students are able to understand the applications of pressure in our daily life and utilized it.

Explicit Teaching/Teacher Modelling (I Do)	Group Work (We Do)	Independent Work (You Do)	Notes for:
1. Discussion and Identify actions as push or pull.  2. Discussion and Illustrations of forces are due to an interaction.	1. Students complete the puzzle on activities of push or pull  2. Students collect the information of forces are due to an interaction.	1. Students identify the push and pull action	1. Express when you apply push and pull in daily life

<p>3. Discussion and Explain of Exploring Forces</p> <p>4. Explain that a force can change the state of motion &amp; a force can change the shape of an object.</p> <p>5. Explain and conduct activities of contact Forces.</p> <p>6. Explain and conduct activities of Non-contact Forces.</p> <p>7. Conduct and observe an experiment of attraction and repulsion between two magnets.</p> <p>8. Conduct and observe an experiment of a straw rubbed with paper attracts another straw but repels it if it has also been rubbed with a sheet of paper.</p> <p>9. Discussion and explain the concept of pressure.</p> <p>10. Conduct an experiment of pressure exerted by liquids and gases.</p> <p>11. Explain atmospheric pressure.</p> <p>12. Discussion on applications of pressure</p>	<p>3. Solved the problems of net force in own way</p> <p>4. Conduct an oral quiz on types of forces</p> <p>5. Students collect the magnetic materials</p> <p>6. Students complete the task on electrostatic force</p> <p>7. Collect the information of pressure exerted by liquids and gases.</p> <p>8. Students collect the information of pressure and applications of pressure in our daily life</p>	<p>2. Write the definition of the net force</p> <p>3. Students complete the homework</p> <p>4. draw the flow chart of non-contact forces.</p> <p>5. Students give examples of magnet force.</p> <p>6. Express the procedure of the experiment in own way.</p> <p>7. Expressed units of pressure</p> <p>8. Solved the problems in own way</p>	<p>2. What is the unit of force?</p> <p>3. What can bring change in state of motion of an object?</p> <p>4. What does a non-contact force require?</p> <p>5. Can force act without an interaction between two objects?</p> <p>6. Write the formula of pressure?</p> <p>7. Write any two applications of atmospheric pressure.</p>
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<p style="text-align: center;"><b>Check For Understanding Questions</b></p>	<p style="text-align: center;"><b>TLM's (Digital+Print)</b></p>
<p><b>1. Factual:</b></p> <ol style="list-style-type: none"> <li>1. What happens to the spring fixed to the seat of a bicycle when we sit on it?</li> <li>2. Why do balloons expand when filled with air?</li> <li>3. Why the tip of a sewing needle is sharp?</li> </ol> <p><b>2. Open Ended/Critical Thinking:</b></p> <ol style="list-style-type: none"> <li>1. Is the gravity a property of earth only?</li> <li>2. Why are we not crushed by atmospheric pressure?</li> <li>3. If gravitational force exists then why does fire go in the upward direction?</li> </ol> <p><b>3. Student Practice Questions &amp; Activities:</b></p> <ol style="list-style-type: none"> <li>1. Give two examples of situations in which applied force causes a change in the shape of an object.</li> <li>2. A blacksmith hammers a hot piece of iron while making a tool. How does the force due to hammering affect the piece of iron?</li> <li>3. Name the forces acting on a plastic bucket containing water held above ground level in your hand. Discuss why the forces acting on the bucket do not bring a change in its state of motion.</li> <li>4. Describe an activity on how pressure is exerted by the liquids.</li> </ol>	<ol style="list-style-type: none"> <li>1. Used prepared Quiz paper.</li> <li>2. Utilized digital classroom.</li> </ol>
<p><b>Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Do you think sometimes the application of force does not result in a change in the state of motion?- Discuss.</li> <li>2. Porters place a round piece of cloth on their heads when they have to carry heavy loads. Why?</li> <li>3. Calculate the pressure, if a force of 100 N acts on area of 10 m<sup>2</sup> ?</li> <li>4. Collect the information between contact forces and non-contact forces.</li> </ol>	

SIGNATURE OF THE TEACHER

SIGNATURE OF THE HEADMASTER

VISITING OFFICER WITH REMARKS