

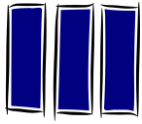
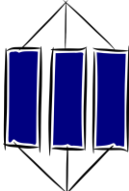
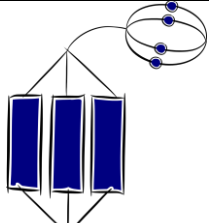


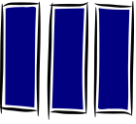
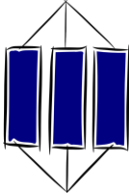
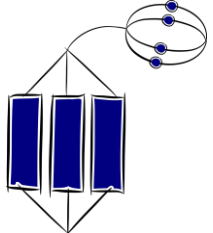


## SOLO - Change of State - Particle Nature of Matter

Achievement Objective: Develop an understanding of the particle nature of matter and use this to explain observed changes					
	 <b>Prestructural</b>	 <b>Unistructural</b>	 <b>Multistructural</b>	 <b>Relational</b>	 <b>Extended Abstract</b>
<b>Task:</b> The structure of matter	I need help to <b>describe</b> matter	I can <b>describe</b> matter by referring to particles	I can <b>describe</b> matter by referring to three states (solid, liquid, gas) and particles called atoms.	I can <b>describe</b> matter by referring to three states (solid, liquid, gas) and particles called atoms.	I can <b>describe</b> everyday life examples of matter by referring to three states (solid, liquid, gas) and particles called atoms.
	I need help to <b>explain</b> the properties of matter (solid, liquid, gas).	I can <b>explain</b> the properties of matter (solid, liquid, gas) in terms of the movement of particles (atoms).	I can <b>explain</b> the properties of matter (solid, liquid, gas) in terms of the movement of particles (atoms) and energy.	I can <b>explain</b> the properties of matter (solid, liquid, gas) by comparing the energy of particles (atoms) within each state and by comparing the movement of particles (atoms) within each state.	I can <b>explain</b> the properties of matter (solid, liquid, gas) by; comparing the energy of particles (atoms) within each state, and by comparing the movement of particles (atoms) within each state. I can reflect upon the movement of particles(atoms) and the energy of particles(atoms) in every day examples of matter (in its three states)

	I need help to identify and or <b>sequence</b> the processes in changing between different states of matter (solid, liquid, gas)	I can identify and or <b>sequence</b> one process in changing from one state of matter to another	I can identify and <b>sequence</b> several processes in changing from one state of matter to another	I can identify and <b>sequence</b> the processes in changing from one state of matter to another and explain how these changes occur in terms of energy transfer and particle movement	I can identify and <b>sequence</b> the processes in changing from one state of matter to another and explain how these changes occur in terms of energy transfer and particle movement. I can reflect upon everyday life examples of processes that change matter from one state to another.
<b>Effective Strategies</b>					

<b>Level 3 and Level 4 Achievement Objective:</b> Group materials in different ways based upon the observation and measurements of the characteristic chemical and physical properties of a range of different materials					
	 <b>Prestructural</b>	 <b>Unistructural</b>	 <b>Multistructural</b>	 <b>Relational</b>	 <b>Extended Abstract</b>
<b>States of water</b>	I need help to identify the state of water	I can <b>identify</b> one relevant state of water. (solid or liquid or gas)	I can <b>identify</b> several relevant states of water. (solid and liquid and gas)	I can <b>identify</b> several relevant states of water. (solid and liquid and gas) AND use physical properties to <b>explain</b> how	I can <b>identify</b> several relevant states of water. (solid and liquid and gas) I can use physical properties to <b>explain</b>

				I can identify the state.	how I can identify the state. I can <b>discuss</b> states of water by referring to everyday life examples of water in these different states
<b>Effective Strategies</b>					
<b>States of Matter</b>	I need help to identify the state of matter	I can <b>identify</b> matter in one relevant state - (solid or liquid or gas)	I can <b>identify</b> matter in several relevant states of water. (solid and liquid and gas)	I can <b>identify</b> matter in several relevant states of water. (solid and liquid and gas) AND use physical properties to <b>explain</b> how I can identify the state.	I can <b>identify</b> matter in several relevant states. (solid and liquid and gas) I can use physical properties to <b>explain</b> how I can identify the state. I can <b>discuss</b> states of matter by referring to everyday life examples of matter in these different states
<b>Effective Strategies</b>					
<b>Changes of State</b> <b>[ Freezing – water(l) to water(s)]</b>	I need help to explain what causes water(l) to change state to water(s)  <b>[ Freezing – water(l) to water(s)]</b>	I can explain one relevant cause for water (l) changing state to water(s)	I can explain several relevant causes for water (l) changing state to water(s)	I can explain several relevant causes for water (l) changing state to water(s) AND explain several consequences of this change	I can explain several relevant causes for water (l) changing state to water(s) AND explain several consequences of this change. I can discuss these

					causes of change of state of water by referring to everyday life examples of these effects when water(l) changes state to water (l).
<b>Effective Strategies</b>					
<b>[Condensation- water(g) to water(l)]</b>	I need help to explain what causes water (g) to change state to water(l)  <b>[Condensation- water(g) to water(l)]</b>	I can explain one relevant cause for water (g) changing state to water(l)	I can explain several relevant causes for water (g) changing state to water(l)	I can explain several relevant causes for water (g) changing state to water(l) AND explain several consequences of this change	I can explain several relevant causes for water (g) changing state to water(l) AND explain several consequences of this change. I can discuss these causes of change of state of water by referring to everyday life examples of these effects when water(g) changes state to water (l).
<b>Effective Strategies</b>					