

**CLUSTER 4**

**Science Learning Design**

<b>Topic &amp; Subtopics :</b>	<b>PLANT SYSTEM SHOOT SYSTEM</b>	<b>Class:</b>	Year 6	<b>Duration:</b>	5 PERIODS
<b>Content Learning Objectives:</b>	<ul style="list-style-type: none"> <li>- Identify the parts of shoot system.</li> <li>- Label parts of shoot system: leaves, stem, fruit and flower.</li> </ul>				

<b>Teaching &amp; Learning Activities</b>		<b>Resources</b>	<b>Summary</b>
<p align="center"><b>Tuning in (Engage, Elicit)</b> <i>Determine prior knowledge and prepare pupils</i></p>	<ul style="list-style-type: none"> <li>➤ Take pupils out from the classroom to look at plants around the school.</li> <li>➤ Engage pupils by asking them questions:                             <ul style="list-style-type: none"> <li>- What can you see? (Expected response – plant)</li> <li>- What plants need to stay alive / grow? (Expected responses – water / sunlight)</li> </ul> </li> <li>➤ Take pupils back to class and ask them to draw a plant on a piece of A4 paper.</li> <li>➤ Share their drawing in pairs then as a group (of 4).</li> </ul>	<p>The surrounding A4 papers</p>	
<p align="center"><b>Finding out &amp; Sorting out (Explore)</b> <i>Time to locate, gather information, organise and process ideas.</i></p>	<ul style="list-style-type: none"> <li>➤ Compare their drawing with a potted plant brought by the teacher.</li> <li>➤ Teacher points at each part and let pupils name the parts (verbally). Teacher will also show word card to help pupils while naming the parts of a plant.</li> <li>➤ Ask pupils to redraw their drawing if something is missing (E.g. Fruit) and this time, ask pupils to label their drawing</li> </ul>	<p>Potted plant (real, preferably, with all parts of the shoot system; flower, fruit, stem and leaves)</p> <p>Word card</p> <p>Visualizer</p>	<p>Expected outcomes:</p> <ul style="list-style-type: none"> <li>✓ Pupils are able to name parts of a plant (verbally)</li> <li>✓ Pupils are able to label parts of a plant (written)</li> </ul>
<p align="center"><b>Making Conclusions (Explain)</b> <i>Draw conclusion and consolidate understanding</i></p>	<ul style="list-style-type: none"> <li>➤ Teacher emphasis that the parts they have drawn and labelled (stem, flower, leaves, fruits) are the upper part of the plant.</li> <li>➤ Highlight to pupils that the upper part of the plant is called shoot system</li> </ul>	<p>Pupils' drawings</p>	<ul style="list-style-type: none"> <li>✓ Pupils are able to recognize stem, leaves, fruits and flowers are parts of shoot system</li> </ul>

<p><b>Go further (Elaborate, Extend, Evaluate)</b> <i>Apply knowledge to develop further understanding</i>  (20minutes)</p>	<ul style="list-style-type: none"> <li>➤ Pupils are asked if there any plants that have the same parts of the potted plant.</li> <li>➤ Ask them to provide one or two examples, write them on a mini whiteboard and share their thoughts to the rest of the class.</li> <li>➤ The pupils design ‘Lapbook’ contain parts of shoot system.</li> </ul>	<p>Mini Whiteboard Lapbook</p>	<p>They are able to design a lapbook of shoot system using real parts of a plant.</p>
---	---	------------------------------------	---

<b>Evaluation</b> <i>(with respect to the Content Learning Objectives)</i>	
<p><b>What worked well?</b></p>	<p><b>What would make it even better next time?</b></p>

## Example of 'Lapbook'

