

<p><b>Teacher makes nominal/factual/technical statements</b></p> <ul style="list-style-type: none"> <li>• Say what the lesson is about</li> <li>• Information giving</li> <li>• Define terms</li> <li>• Tell/know/ask facts, definitions, techniques</li> <li>• 'Research' facts, definitions, techniques</li> </ul> <p><i>shift: Remember</i></p> <p><b>Learners are expected to</b></p> <ul style="list-style-type: none"> <li>• Imitate method, copy object</li> <li>• Follow procedure</li> <li>• Find answer using procedure</li> <li>• Give answers</li> </ul> <p><i>shift: fluency, report/record actions</i></p> <p><b>Teacher directs learner perception/attention</b></p> <ul style="list-style-type: none"> <li>• Tell/show objects which are perceived as having a single feature</li> <li>• Tell/show objects which are perceived as having multiple features</li> <li>• Tell/show multiple objects</li> <li>• Indicate identification of characteristics/properties</li> <li>• Indicate classification</li> <li>• Indicate comparison</li> <li>• Indicate identification of variables and variation</li> <li>• Summarise what has been done</li> </ul> <p><i>shift: public orientation towards concepts, methods, properties, relationships</i></p>	<p><b>Teacher asks for learner response</b></p> <ul style="list-style-type: none"> <li>• Tells what to think about</li> <li>• Use prior knowledge</li> <li>• Find answer without known procedure</li> <li>• Visualise</li> <li>• Seek pattern</li> <li>• Compare, classify</li> <li>• Describe</li> <li>• Explore variation</li> <li>• Informal induction</li> <li>• Informal deduction</li> <li>• Create objects with one feature</li> <li>• Create objects with multiple features</li> <li>• Exemplify</li> <li>• Express in 'own words'</li> </ul> <p><i>shift: personal orientation towards concepts, methods, properties, relationships</i></p> <p><b>Discuss implications</b></p> <ul style="list-style-type: none"> <li>• Varying the variables deliberately</li> <li>• Adapting procedures</li> <li>• Identifying relationships</li> <li>• Explication/ Justification</li> <li>• Induction/ Prediction</li> <li>• Deduction</li> </ul> <p><i>shift: analysis, focus on outcomes and relationships</i></p>	<p><b>Integrate and connect mathematical ideas</b></p> <ul style="list-style-type: none"> <li>• Clarify</li> <li>• Associate ideas</li> <li>• Generalisation</li> <li>• Redescription</li> <li>• Summarise development of ideas</li> <li>• Abstraction</li> <li>• Objectification</li> <li>• Formalisation</li> <li>• New definition</li> </ul> <p><i>shift: synthesis, connection</i></p> <p><b>Affirm/ act as if we know ...</b></p> <ul style="list-style-type: none"> <li>• Explore properties of new objects</li> <li>• Adapt/ transform ideas</li> <li>• Application to more complex maths</li> <li>• Application to other contexts</li> <li>• Evaluation of development of new idea</li> <li>• Prove</li> </ul> <p><i>shift: rigour, objectification, use</i></p>
---	---	--

