

Diagram problems and visual problems Levelling Criteria	
Identify the given information and represent it in another way	
<ul style="list-style-type: none"> Use practical resources to begin to represent information given in words or as a diagram (with suggestions from an adult) 	<i>Level 1</i>
<ul style="list-style-type: none"> Use practical resources or drawing to <u>accurately</u> represent information given in words or as a diagram 	<i>Level 2</i>
<ul style="list-style-type: none"> Able to suggest different ways of representing the given information (interpret diagram with resources, use diagrams, adopt a suitable code) 	<i>Level 3</i>
<ul style="list-style-type: none"> Identify the given information and be able to represent it in another way appropriate to the context 	<i>Level 4</i>
<ul style="list-style-type: none"> Be able to combine information given in different formats and represent it in an appropriate manner 	<i>Level 5</i>
Use a systematic approach to solve the problem and a way of recording if necessary	
<ul style="list-style-type: none"> Able to organise some answers into pairs / groups with similar characteristics with adult support 	<i>Level 1</i>
<ul style="list-style-type: none"> Able to organise answers into groups with similar characteristics (after adult suggestion) 	<i>Level 2</i>
<ul style="list-style-type: none"> Begin to tackle the problem systematically (after initial attempt) by grouping answers with similar characteristics 	<i>Level 3</i>
<ul style="list-style-type: none"> Aware that problem should be tackled in a systematic way (initial attempts may not be systematic, but approach should change once problem is understood) 	<i>Level 4</i>
<ul style="list-style-type: none"> Use a system for finding all possible answers which uses mathematical reasoning to justify final solution. 	<i>Level 5</i>
Use drawings or annotations to help visualise the problem using familiar shapes or patterns	
<ul style="list-style-type: none"> Talk about the problem using practical resources or drawings as a support 	<i>Level 1</i>
<ul style="list-style-type: none"> Record answers found by annotating a diagram or sketching 	<i>Level 2</i>
<ul style="list-style-type: none"> Record answers <u>clearly</u> by annotating/sketching diagrams or using coding 	<i>Level 3</i>
<ul style="list-style-type: none"> Record answers in an organised and clear way using a suitable shorthand system. 	<i>Level 4</i>
<ul style="list-style-type: none"> Communicate findings in an appropriate way, with sufficient detail to enable others to interpret their work. 	<i>Level 5</i>
Try other possibilities to check the solution	
<ul style="list-style-type: none"> Be able to explain why some solutions are not possible within the rules of the problem 	<i>Level 1</i>
<ul style="list-style-type: none"> Able to persevere and consider wider range of solutions 	<i>Level 2</i>
<ul style="list-style-type: none"> Begin to look for missing answers by referring to systematic working and checking for repeats 	<i>Level 3</i>
<ul style="list-style-type: none"> Explain approach to problem verbally or in writing to justify solution 	<i>Level 4</i>
<ul style="list-style-type: none"> Use mathematical reasoning to justify final solution in written form 	<i>Level 5</i>
Best-Fit Assessed Level:	
<i>(It is <u>not</u> possible to sub-level an individual problem from this criteria)</i>	