Year 5 Science: Light	Assessment: The Light Maze

Purpose of assessment: Investigate and explain how the transfer of light can be changed.

Knowledge and Understanding	Investigating	Investigating	Investigating	
Science understanding- How does the student describe how the transfer of light can be affected?	**Questioning and predicting-** Does the student pose questions and predicts outcomes or changes **Planning and conducting –** Does the student identify key steps	**Process and analyse-** How does the student report on their findings **Evaluate-** Does the student suggest improvements to methods?	**Communicating —** Is the student using scientific language and representations?	
Explains how the changes can affect the behaviour of light.	Prediction is supported with scientific understanding. Explains a logical sequence in a procedure.	Develops a detailed explanation that uses observations as evidence and is supported with scientific understanding. Explains with supporting detail how methods could be improved.	Uses accurate scientific language and diagrams to represent observations and knowledge.	**A**
Describes how light has changed direction using reflection.	Poses a scientific question in order to investigate the effect of changes made to the maze and predicts results. Identifies the key steps in procedure	Describes observations and compares with their prediction. Suggests improvements to the methods used.	Presents information using scientific language and diagrams.	**B** **C**
Shows how light has travelled from a source.	Poses a question. Identifies ideas for a procedure.	Identifies if their results match their prediction. Identifies difficulties experienced in investigation.	Presents information using everyday language.	**D** **E**

By The end of year 5

Students use their curiosity, senses and intuition as a basis for exploring, investigating and testing their scientific thinking about the world. They understand that science is a way of constructing new knowledge and that it is based on observations of, and inferences from, the natural world. They understand that science can contribute to the understanding of many different kinds of activities, including work and leisure. They are aware that people of all ages and backgrounds choose to work in science or science-related careers.

Students use the essential processes of Ways of working to develop and demonstrate their Knowledge and Understanding They develop their ability to work scientifically by formulating scientific questions, by conducting scientific activities, and by individually and collaboratively planning and conducting investigations. They reflect on their
learning and their own and others' points of view and values relating to science.

Students select and use tools and technologies, including information and communication technologies (ICTs), in purposeful ways. They use ICTs as an integral component of their learning, to inquire, create and communicate within scientific contexts.
Students demonstrate evidence of their learning over time in relation to the following assessable elements:

- Knowledge and understanding
- Investigating
- Communicating
- Reflecting

Reference:

Queensland Studies Authority 2010, ‘Queensland Curriculum ,Assessment And Reporting Framework’ Retrieved 10th November 2013 < http://www.qsa.qld.edu.au/downloads/p_10/qcar_el_science_laf.pdf >