Learning Science

Your group has the task of producing two outcomes, to share with other groups.

> 1) a guide to learning science
> 2) a representation of the science learner

You will be provided with a range of information to help you. Your group needs to decide how it will organise itself to use the information provided to produce the two outputs of the session:

1) **A guide to learning science**

There has been lots of research into learning, and some of it might be very helpful in advising students how to study most effectively. Your task here is to look at the different examples of research , and to see if any of it suggests the best ways to study. Your guide should consist of a list of **advice points** that you could give to other KS4 students to help them study and revise science.

2) **A representation of the science learner**

You are to produce **a scientific model** of the human learner. You are asked to produce a poster that represents key information about how scientists believe people learn. You will have to sort, select, organise and summarise information to be included on your poster.

A model is a way of thinking about something – it is usually a simplified version of something more complicated. There are many different ways of modelling things: diagrams, charts, algebra, descriptions etc., as well as actual solid models. Science uses a wide range of different ways to represent information.

Your model of how humans learn should be presented on a poster. Your group should decide how to best go about this – but it is likely that a poster will be more effective if it is not just lots of words.

You might want to think of the learner as a system that processes information. The poster could represent the science learner as a 'system' comprising of parts that work together, and show how information passes through the system.

Note: there is no 'correct' way of doing this – there are often many ways of organising and representing information that can be useful. Scientists build

models to help them think about phenomena (such as learning), and test out ideas, and to suggest useful questions and experiments. These models can be very useful, even if they are later found to be limited representations. Poor models can still be useful if they help generate ideas and questions that will eventually lead to better models.

At the end of the session, you will get a chance to look at each other's models and compare them.