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| Sub project | **Lesson title** | **Resources** |
| Biological Sciences | Nature of research | Lesson plan  Powerpoint  Work book  Details of researchers. |
| Learning objectives  Explain what research is and why we do it.  Understand what it might be like to be a researcher.  Describe some of the methods researchers use.  Think about planning my own research. | | |
| Differentiation?  Less able pupils can make brief notes on the page provided in their booklets to help aid discussion.  More able pupils can focus on terminology (reliable, fair test, different variables etc). | | |
| Useful websites  <http://www.rcuk.ac.uk/careersinresearch>  <http://royalsociety.org/uploadedFiles/Royal_Society_Content/about-us/equality/2011-06-15-Mothers-in-Science.pdf> | | |
| Activity | | **Timing** |
| Starter: write down one thing you learnt about research during your visit to the university on a post it and stick it to the board. Discuss responses.  Main: in a group of 4 pupils look at a different researcher each and answer the questions on the board in relation to their researcher. Each person then introduces their researcher to the group.  Introduce idea of model organisms in research. What makes a good model organism? Show video of usage. Give examples of organisms and ask if they would be good model orgs.  Introduce C.elegans and what it can do. Show video and then explain that they will be using it too. Show alcohol video. What could they do during the investigation? What do they hope to learn about research?  Plenary: What would they need to do to make it ‘good research’ (i.e. follow the scientific method).  introduce scientific method. Discuss ‘fair test’ and reliable. Discuss different types of variables. | | 10 mins  15 mins  10 mins  10 mins  10 mins |