



# Case study

Please review the experimental proposal provided below as a group.

## Experimental proposal

Dr. Smith, a scientist at your research institution, would like to conduct an experiment investigating the effects of caffeine on memory using rats. Would you approve of his research proposal? He plans to inject different biologically relevant doses of caffeine into the rats and then conduct behavioral observations on each individual as they find their way through a maze apparatus. Dr. Smith has extensive experience in this kind of research protocol and has laboratory space to house the rats appropriately.

**Please discuss the following questions as a group and note your answers below.**

1. How is the proposed research important?
2. Do you need additional information to make your decision? If so, what information is required?
3. How are the three R's of research (reduce, refine, replace) relevant to your evaluation of this research proposal?
4. Would you approve this study?