For each of the following questions, outline how you could use an A/B test to find an answer. Be sure to identify all five key components of an A/B test we outlined above.

* Does a new supplement help people sleep better?
* **Two versions:** new supplement vs already existing supplement
* **A sample:** divide into two groups: people who take the new supplement vs people who take already existing supplement
* **A hypothesis:** I expect people will sleep better after taking the new supplement
* **Outcome(s):** find the result to see if people sleep better with the new supplement or the already existing supplement
* **Other measured variables:** Men vs Women
* Will new uniforms help a gym’s business?
* **Two versions:** new uniforms vs old uniforms
* **A sample:** divide into two groups of people who prefer the old uniforms vs do not prefer the old uniforms
* **A hypothesis:** I expect new uniforms will help the gym’s business
* **Outcome(s):** find the result of sales between the new uniforms vs old uniforms
* **Other measured variables:** design of new uniforms vs design of old uniforms
* Will a new homepage improve my online exotic pet rental business?
* **Two versions:** old layout vs new layout of the website
* **A sample:** old layout design vs new layout design
* **A hypothesis:** I expect new homepage will improve my online exotic pet rental business
* **Outcome(s):** find the number of visits when the new website opens
* **Other measured variables:** homepage vs no homepage
* If i put ‘please read’ in the email subject will more people read my emails?
* **Two versions:** email subject with ‘please read’ vs no ‘please read’
* **A sample:** divide into two groups of people who receive email subject with ‘please read’ & no ‘please read’
* **A hypothesis:** I expect more people to read emails with subject ‘please read’ included
* **Outcome(s):** find the number of people who read emails with ‘please read’ and no ‘please read’ (send same emails with different subjects to same receipients)
* **Other measured variables:** bold or no bold