A/B Testing Questions

Q1 - Does a new supplement help people sleep better?

* Versions - The two versions would simply be two pills, one the drug currently being tested and the second, a placebo like a salt pill that has no medical effect on subjects being tested.
* Sample – Steps would have to be taken that the group had a similar age range and sleeping habits prior to being tested. To get really deep we could make sure that people have the same socioeconomic status and/or same living conditions to filter out things like stress or ‘city noises’ that could be causing the lack of sleep and not just general insomnia(if that is what we are testing for).
* Hypothesis – I would assume this would be something along the lines of that the new supplement would decrease the time it took for subjects to fall asleep or that it helped subjects reach a deeper level of sleep vs the test group
* Outcomes of Interest – most likely one of the two metrics mentioned above since that would indicate a success of the supplement if it did those things.
* Other Measurable Variables – You could also see if the subjects moved less while asleep, if brain activity was different and(although harder to quantify) if they reported feeling more rested upon waking.

Q2 - Will new uniforms help a gym’s business?

* Versions – An easy decision again as the two versions would simply be the old uniform and the new uniform.
* Sample – If you could study a gym chain like LA Fitness or Planet Fitness and then find a few locations that were relatively similar in sales/demographics, etc it would be easy to split them up into two test gyms. Short of that it gets a bit trickier and you have to run different tests on an individual gym and measure outcomes.
* Hypothesis – Depending on your angle it would either be that new uniforms might make the gym look more updated and increase customers. Otherwise you might be arguing that employee uniforms don’t matter to customers in a gym setting and that it’s an unnecessary business expense.
* Outcomes of Interest – Do new uniforms increase the gyms number of patrons? Does it increase the number of people walking in the door to ask about membership? Does it increase the amount of money people spend on extras like gym gear or upgraded benefits?
* Other Measured Variables – You could turn your attention to the staff and see if the uniforms have any measurable effect on productivity.

Q3 – Will a new homepate improve my online exotic pet rental business?

* Version - This seems like it would be tough to test without actually getting a new homepage to have users interact with.
* Sample – If you are unable to find a workaround for the two different website(since that seems like it would confused potential customers), then you would just have to measure the two different groups as users before the new site and users after. In this instance though it might be worth doing a focus group beforehand and ask some targeted questions like ‘What features do you find most useful in a rental website?’ or ‘Here are mockups of 3 different potential front pages for our website. Which one do you prefer and why?’
* Hypothesis – People do not like change..especially when it comes to design and layout of a favorite website(I’m looking at you SB Nation) so the hypothesis here would depend on whatever route you took with the testing.
* Outcomes of Interest – Did the homepage engage users more by either increasing time spent on the site or increasing amount of goods bought?
* If we wanted to get super fun(and expensive) we could get a focus group with eye tracking technology to look at the old vs the new mockups and see where people are focusing their attention.

Q4 – If I put ‘please read’ in the email subject line will more people read my emails?

* Version – Simply send out the exact same e-mail to people but half have the ‘please read’ included in the subject line. Might also be worth seeing if the placement of the ‘please read’ affects things as well.
* Sample – split the e-mailing list into two groups(or more if you want to test that placement theory) and then send each group one version of the e-mail with treated subject line.
* Hypothesis – People will read the e-mail with the subject line ‘please read’ in it more often than the other version.
* Outcomes of Interest – Was the e-mail with the treated subject line opened more often. Was it opened more quickly after sending than the other version? Was it deleted less than the other version?
* Other outcomes – Did people respond more(if they were supposed to) to the treated e-mail?