



Experiment Title:

How clean
is clean?

Student's Name:

Parent's Name:

Parent's Email:

Parent's Phone:



Purpose - Ask a Testable QUESTION:

What do you want to learn? Keep it simple, something you can do at home.

What soap cleans your
hands the best?

Background RESEARCH:

What are three things you learned relating to your topic?



- 1: there are three
different shapes of
bacteria. things that
- 2: kill bacteria: boiling
water, alcohol, bleach,
and ammonium
compounds.

Independent Variable:

What is the one thing you want to try changing in your experiment?



Forming a HYPOTHESIS (Taking your best guess):

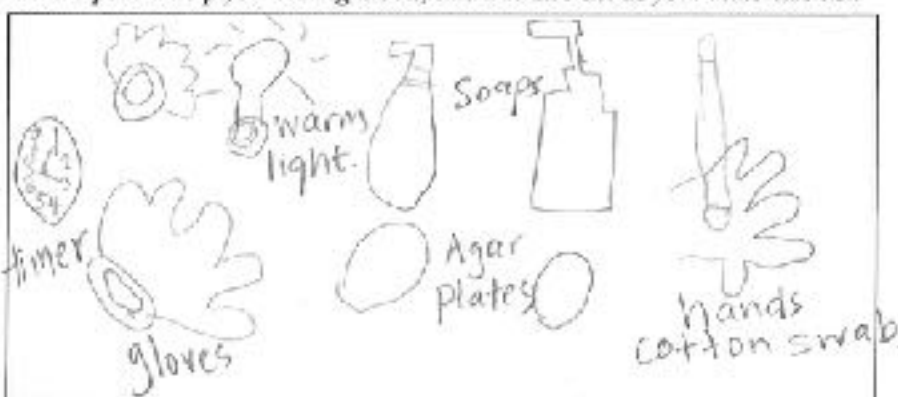
What do you think will happen when you change your variable?

Hand & Body Works @ hand
sanitizer cleans

hands the best.



Draw a picture of how your **EXPERIMENT** will be set up:
*Draw what you will need including measuring tools and safety equipment.
Have a parent help you writing labels, this will also act as your materials list.*



Step-by-Step Plan:



What are the steps to complete your experiment? Parents can help with writing.

- 1: Wash hands with only water using the 7 steps of handwashing found on www.highspeedtraining.co.uk.
- 2: Waited 3 hours, living life as usual: going outside, playing with friends etc.
- 3: Wash hands with one of the soaps (some steps) for 20 seconds each time (control: no washing)
- 4: Swab each finger of my right hand with a cotton swab, then swab into sterile agar plate.
- 5: Use warm lamp to keep their temperature between 80-85° F.
- 6: Keep track of how long it took for bacteria to grow and count colonies each day.



Carry out the experiment as planned and Collect Data:

Record the results on the T Chart below.

Independent Variable

Results / Measurement (use number to record your units)

Independent Variable	Results / Measurement (use number to record your units)
SOAPS	BAC to 1/4 color pos
Test #1 control (no soap)	725
#6 BBW soap	
Test #2 Method soap	140
Test #3 Dial soap	
#4 Roger soap	
#5 Rogotomix soap	

Drawing a **CONCLUSION:**



Examples: Which test had the biggest results? Which had the smallest results?

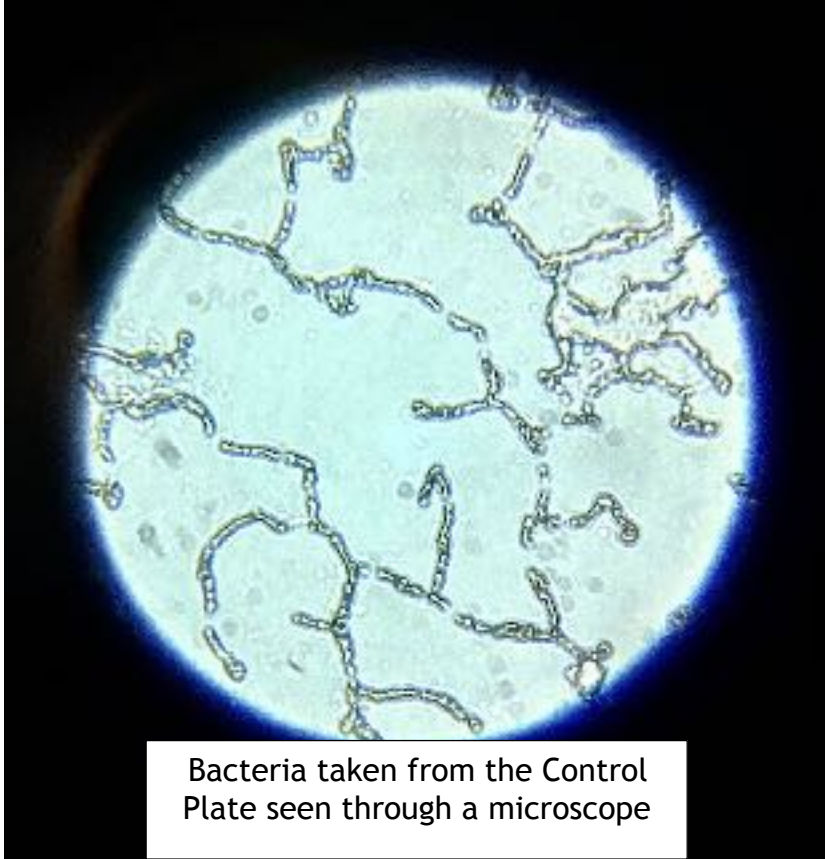
Which result was in the middle? Did anything surprise you? A parent can help.

Both Method soap
and Bath and Body Works
santizer. cleans hands the
best.



REPORT: Was your hypothesis correct? Why or why not?

Yes my hypothesis was
correct, but method soap
also works the best.



Bacteria taken from the Control Plate seen through a microscope



Control Plate (no hand washing)

Bacterial Growth

