

## \*FUN FACTS\*

Scientists recommend we wash our hands for at least 20 seconds with soap and water to remove germs.

Only 5 percent of people typically wash their hands long enough!

Globally, as many as 4 in 5 people don't wash their hands. Some can't wash them regularly because they don't have access to soap and water.

## BREAD EXPERIMENT



See the benefits of hand-washing with this classic experiment, which school kids have been trying for decades that shows that our hands are covered with germs – and that hand-washing can get rid of them.

### Materials needed:

- 4 untouched slices of bread
- 4 plastic zip-top bags, or clear plastic containers
- Soap and water
- Hand sanitizer
- Tongs
- Marker or pen/tape you can write on

### Directions:

1. Use the tongs to pick up the first slice of bread (do not touch it), and put it in the first bag or container. Mark this as “#1 / Control.”
2. With unwashed hands, pick up the second piece of bread and hold it in your hands, making sure all of it touches your hands. Put this into bag or container and mark it “#2 / Dirty hands.”
3. Rub your hands with hand sanitizer. Once it dries, handle the third piece of bread as you did with #2. Put it in the third bag or container and mark it “#3 / hand sanitizer.”
4. Clean your hands thoroughly with soap and water for at least 20 seconds. Dry your hands and then handle the fourth piece of bread, and put it in a bag or container marked “#4 / clean hands.”

Watch the bread over the next 2-7 days. Which grows the most mold? Which grows the least? What does this tell you about how clean your hands are, and what cleans hands best?

## SPREAD THE NEWS



What other types of greetings do you know of that people in other places and times have used to say hello? What are some good ways of germ-free greeting?

Draw a picture that your town could use to encourage people to use one of these greetings instead of shaking hands.

SHARE YOUR ACTIVITIES WITH US! UPLOAD YOUR VIDEOS & PICS BY TAGGING @HISTORY AND USING #HISTORYATHOME. YOU COULD BE FEATURED AS OUR "STUDENT OF THE WEEK!"

## DID YOU KNOW?

IGNAZ SEMMELWEIS PUBLISHED HIS RESEARCH ABOUT THE IMPORTANCE OF DOCTORS WASHING THEIR HANDS IN MEDICAL JOURNALS IN THE 1840S. AT THE TIME, HIS IDEAS ARE LARGELY IGNORED OR LAUGHED AT BY OTHER DOCTORS.

IN THE 18TH AND 19TH CENTURIES, LAZZARO SPALLANZANI AND LOUIS PASTEUR SHOWED THAT BACTERIA AND MOLD SPREAD THROUGH CONTAMINATION, NOT "SPONTANEOUS GENERATION".

BRITISH NURSE FLORENCE NIGHTINGALE WROTE IN 1860 THAT "EVERY NURSE OUGHT TO BE CAREFUL TO WASH HER HANDS VERY FREQUENTLY DURING THE DAY."