1: Spread of Germs
One child sneezes, and the whole room gets sick! Given our current atmosphere this activity is perfect for helping children learn about the spread of germs and the importance of healthy practices, such as hand washing. Start this activity by reading a germ-related story. Also consider having cut-out silhouettes on construction paper to show the shapes of common germs and viruses; simply performing a google search shall yield a variety of germ-cut-out options. With visuals and a story children will have a foundation for completing the following activities: Turmeric Hand Washing Challenge and The Blue Chalk Ball Challenge. Completing both activities will reinforce the importance of hand-washing and diving deeper into this topic will help children better comprehend the pandemic in which they are living through.

Reading Recommendations:
Children
1. Germs Are Not for Sharing by Elizabeth Verdick
2. Champion for Children’s Health by Greg Ptacek
3. The Care and Keeping of You by Valorie Schaefer
4. How Do Dinosaurs Get Well Soon? by Jane Yolen
5. A Sick Day for Amos McGee by Philip C. Stead

Juniors
1. Great Big Book of Tiny Germs by Bill Nye
2. Health and Medicine by David Ritchie
3. America’s Health Care Crisis by Nancy Levitin
4. Terrible Typhoid Mary by Susan Campbell Bartoletti
Teens/Adults

1. *A field guide to germs* by Wayne Biddle
2. *The Story of the Human Body* by Daniel Liberman
3. *The Plague* by Albert Camus
4. *Pale Horse, Pale Rider* by Katherine Anne Porter
5. *The Stand* by Stephen King

Activity:

Materials

Turmeric Hand Washing Challenge
- large bowl of water
- turmeric

Blue Chalk Ball Challenge
- sink or hand wipes
- blue chalk (or any colored chalk)
- small/medium ball

Procedures

You can choose to complete both activities, or only one!

Turmeric Hand Washing Challenge
This activity teaches the importance of hand washing.

1. Sprinkle your hands with turmeric to symbolize “germs.”
2. Using a large clear bowl filled with warm water for washing, demonstrate the 20 second rule for hand-washing (wet, lather, scrub, rinse, dry).
3. Repeat as necessary until the turmeric is gone and the clear water in the bowl has turned yellow.

Blue Chalk Ball Challenge

1. Start by having one person coat their hands with blue chalk.
2. This person should hold the ball in their hands and then start to pass it to the others participating (pass the ball at least twice around the group).
3. Once the ball returns to the first person, ask everyone to inspect their hands. Everyone should have some blue chalk on their hands. With chalk representing germs, you can now see how easily germs can spread — it would be valuable to talk about how easily germs spread and utilize other online resources to investigate the spread of germs and how this connects to our present times.

Dive Deeper:
After reading and/or completing the activities, does this topic peak your interest?

Check out these websites to further explore the topic of health, germs, and diseases:
1. NNLM: Summer health programming https://nnlm.gov/initiatives/summer-reading

Check out these videos and films to visually learn more:
1. How Germs Spread | Explaining the Science for Kids — https://www.youtube.com/watch?v=YBGsoimPXZg
2. Germ Wars - The story of kids as heroes in preventing germs — https://www.youtube.com/watch?v=O5PwLAZNnKc
3. Germs! - Sid the Science Kid — https://www.youtube.com/watch?v=ghLkwSlWSXw
4. The future of infectious diseases by Paul Cosford a TEDxUoChester Talk — https://www.youtube.com/watch?v=qeSIJrmg7nU
6. Contagin (2011 Film)
7. Pandemic (Netflix Docuseries)
8. Outbreak (1995 Film)

To stimulate the brain and engage in active learning, ask these questions:
Looking to build upon writing skills? Share your responses to these questions in a personal journal or brief paragraph essay.
Beginning to build upon verbal communication and discussion based skills? Share your responses around the dinner table at night with family members; each person can contributes to the conversation with their own perspectives.
Looking to visually demonstrate your ideas? Share your responses by drawing and labeling a diagram, creating a storyboard with pictures, construct a 3D model, or acting out a scene.

1. What are the results of not properly washing your hands?
2. What do you think the “germiest” thing in your house is? Why do you think this place or object has the most germs?
3. Besides washing your hands, what are other ways to prevent the spread of germs? Do you think these practices should be required by law for people at places other than their homes, such as schools, offices, grocery stores, and other public institutions?
4. Can you think of a new invention (or think of a new addition to better a preexisting invention) that could help prevent the spread of germs; help cure a specific disease; or help citizens become more aware of public health issues?

For example, due to the spread of COVID-19, scientists, engineers, artists, and individuals around the world have started to produce amenities that allow people to remain protected and healthy, while still being social and gathering with family or
friends. Check out these reimagined airplane seat dividers (https://robbreport.com/motors/aviation/seats-covid-19-protective-shields-2921414/), or these protective suits designed for people to still go out and enjoy concerts and festivals (https://consequenceofsound.net/2020/05/covid-19-protective-suit-music-festivals-clubs/)