



The Secret of Soap

A Scientific Experiment

Resources: bucket/s; glitter; Vaseline; soap

- **Prep** – buckets with water – not too much that it splashes everywhere
- **Intro script** – we're going to carry out a scientific experiment to discover 'the secret of soap' and learn *how it is the only way to wash germs away*. Once we've finished our experiment we will write up our results afterwards.
- **Ask** them (if you haven't in the intro) if they ever forget to use soap... If none of them own up, I'd asked if they've ever seen anyone not using soap. All hands will probably fly up!
- **Say** – the reason people forget is that they probably don't know how it works and because we can't see germs it's even easier to forget that they're there. In this experiment we are going to discover the '**secret of soap!**'
- **Ask** – if anyone's ever had cold, the flu, a cough, diarrhoea?
- **Say** – these are all preventable sicknesses that, if everyone in the world washed their hands properly with soap, we could reduce by 50%!
- **Say** (whilst applying Vaseline and glitter to your hand) that germs are very powerful and stick to our hand much like how glitter sticks to Vaseline. Demonstrate.
- **Can say** – in a scientific experiment everything has to be the same so we all work together at the same time – i.e. follow my lead and don't start talking about rainbows and playing with the buckets/ glitter/ anything else in eyeshot.
- **Do** - Apply Vaseline to all of their hands and then glitter, once glitter applied rub hands together so the glitter sticks (like how germs stick to the natural grease on our hands)
- **Do** – with eyes closed try washing with just water ... like they normally would after going to the toilet - the glitter doesn't come off.
- **Can Ask:** Does anyone know how soap works – or the 'secret of soap'?
- **Demonstrate:** Use the soap to wash your hands first and explain that water is not strong enough to get rid of germs. Germs are powerful and want to stick to us and not let go! Soap is has a very special power it makes lots of bubbles which 'traps' the germs. We then use the water to wash them away! Note – soap doesn't kill germs, it washes them away into the water.
- **Their turn!** Give them all a small squirt of soap and wash their hands (front and back) and see the 'secret of soap' for themselves
- **Write (draw) up their results:** All scientist need to record their results – trace around their hands and make a poster showing the difference between soap / no soap! Example attached! Steve sat down with them but I just left them to it!