

Time	Audio	Visual
0:00-0:10	We are going to explore how easily microbes can transfer through touch. We will do this using UV gel to represent microbes and a UV lamp to show transmission	“Key Stage Two: Hand Hygiene – Healthy Hands”
0:10-0:26	The resources required are UV gel or powder, a UV lamp, hand soap, a water basin and paper towels. If you do not have access to UV gel and a UV lamp, you can use cooking oil and eco friendly glitter instead	The ingredients for the experiment are laid out on the table: a UV lamp, a bottle of UV gel, a roll of paper towels, a marker pen, and a pump bottle of hand soap
0:27-0:31	Please take a moment to look at the e-Bug lesson plan for information on health and safety	“Please look at the e-Bug lesson plan for information on health and safety”
0:32-0:40	For this experiment split the class into four groups. Cover one student’s hand from each group with UV gel.	UV gel is rubbed into the hands
0:40-0:59	Ask the student with UV gel on their hands in Group A to not wash their hands, Group B to wash their hands with water for 3 seconds, Group C to wash their hands with water for 20 seconds, and Group D to wash their hands with soap and water for 20 seconds	Four different scenarios split the screen, each showing a water basin: the first shows the water basin only labelled “Not washing hands”, the second shows hands being washed under the tap for 3 seconds labelled “Wash with water for 3 seconds”, the third shows hands being washed under the tap for 20 seconds labelled “Wash with water for 20 seconds”, and the fourth shows hands being washed with soap under the tap for 20 seconds labelled “Wash with soap and water for 20 seconds”
1:00-1:04	Ask the students to shake hands with every person in the group	Two people shaking hands
1:05-1:27	Shine a UV lamp on their hands. In which group did the microbes travel the furthest? Why do you think this might be the case? This experiment shows that washing hands for 20 seconds with soap and water is the best way to wash your hands and reduces the spread of microbes	Four different scenarios split the screen, each showing a hand under UV light: the first shows lots of UV gel on the hand labelled “Not washing hands”, the second shows some UV gel on the hand labelled “Wash with water for 3 seconds”, the third also shows show UV gel on the hand labelled “Wash with water for 20 seconds”, and the fourth shows no UV gel on the hand labelled “Wash with soap and water for 20 seconds”
1:28-1:34	Go to www.e-Bug.uk for more ideas on how to teach about hand hygiene	“For the full lesson plan, extension activities, work sheets, answers, and much more visit the e-Bug website: www.e-Bug.eu ”