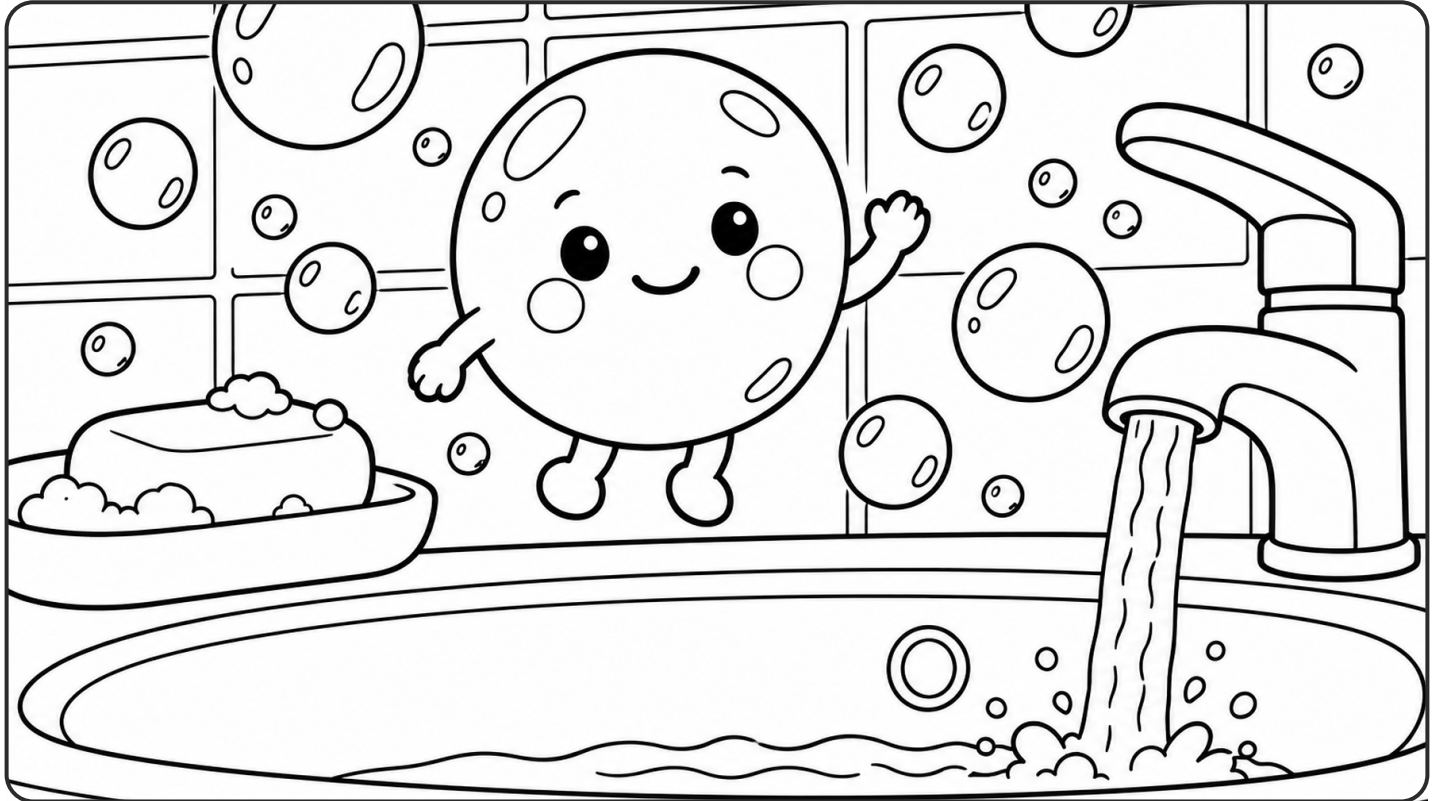


How does soap get the dirt off my hands?



My hands are dirty. I rinse them with water, but they still feel greasy. Then I add soap, and they come out clean! How does soap get the dirt off?



Why?

1. Dirt and germs get stuck in the oil on your skin.

Your skin always has a thin layer of oil on it, and dirt sticks in it like crumbs stuck in butter. Water alone can't help. Water and oil do not mix, so the water just rolls over the oil and runs away.

2. Every tiny bit of soap has two ends.

One end loves water. The other end loves oil. When you rub soap on your hands, the oil-loving ends dive right into the oil and hold on tight.

3. Soap wraps the oil into tiny balls.

More and more soap bits crowd around a drop of oil, with the dirt and germs trapped inside. The outside of the ball is covered with water-loving ends, so when you rinse, the water carries the balls down the drain. Bye bye, germs!

Try it! Oil, water and soap

You need: a clear jar with a lid, water, a spoon of cooking oil, a squirt of dish soap, and a grown-up

1. Ask a grown-up for a clear jar with a lid. Put in some water and a spoon of cooking oil, close it, and shake.
2. Wait a minute. The oil floats back to the top.
3. Now add a squirt of dish soap and shake again. This time, do they stay mixed?

What happened? The oil-loving ends of the soap grab the oil, and the water-loving ends grab the water. So the oil and water stay mixed.

Video + more questions:
whywhywhykids.com/soap



scan with a grown-up