Introduction

We can’t see them, but do inhale them every day: particulate matter, one of the most harmful forms of air pollution. But what are they? Particulates are small particles floating in the air, smaller than 10 micrometer (PM10). They consist of matter differing in size, origin and chemical composition. Most of them come from exhaust fumes by traffic, cattle farms and (industrial) combustion processes. In large cities, like Shanghai or New Delhi, dirty air is one of the most common health risks. That is why so many people wear face masks nowadays. We need to know where PM10 levels are high, we can make healthier choices. Find out what the most healthy choices are, and then make your city even cleaner.

Research your environment

If we know where particulate levels of the air are high, we can make healthier choices. Find out what the most healthy choices are, and then make your city even cleaner.

Tip:

Collecting folk remedies
do it together & find out how things work

This is what you need to catch particulate matter:

- Empty milk carton
- Vaseline
- Double-sided tape
- Scissors
- Ruler

catch the air quality in the kitchen.

At home, near your stove to investigate air quality in the kitchen. Or inside, near a park to see the differences. Measure the air at a busy street or a park to see the differences.

DO-IT-TOGETHER
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Catch particulate matter in the air

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Catch particulate matter in the air

Make your low-tech particulate matter meter with the help of an empty milk carton and discover how healthy your environment really is.

1. Cut off the top and bottom of the milk carton.
2. Cut the sides at the folds, creating long strokes.
3. Measure each stroke and exactly cut it in half.
4. Paste a piece of double-sided tape at the printed side of the carton sections.
5. Apply a layer of vaseline to the whole surface of the white sides.
6. Now gently peel off the protective layer of the double-sided tape.
7. Put your particulate meter at a place you want to measure the amount of particulate matter and wait a few days.
8. Reading the results:
   Look how many dark dots appear on your meter. The more dots appear, the more particulate matter is floating in the air. Compare the different spots you have measured.

We are curious about the results of your particulates meter! Share them with us by using #sciencebus on Instagram or Twitter. Want to find out more? At togethersciencebus.eu you can find more instructions to measure things yourself.