

WHAT CAN YOU MEASURE?

Sometimes indoor air pollutants can build up to levels that cause health problems because of the environmental conditions. The humidity of the air can have an important impact on allergies. If the air in your home is too humid it can create a breeding ground for common allergens such as house dust mites and mould. Temperature and humidity can be used to help understand indoor environmental conditions that can affect the level of air pollutants indoors

If the humidity is high for long periods of time it can cause damp and mould. Damp and mould are linked to asthma and allergies in children, so we want to avoid creating these problems in our homes.



In your pack you should have a little sensor that can tell you the temperature (in °C) and percentage relative humidity (%). You can use this to investigate the temperature and humidity around your home. Pick one day you want to investigate and using the boxes (on this page and the next) to record the temperature and humidity when you are doing these activities. We've also left one empty box for you to choose another activity to investigate.

After you have measured the temperature and humidity, colour in the circles next to them using the colour scales. The values in the colour scales are a rough guide of the normal temperatures found in buildings.



Waking up or going to sleep

Location/room

Temperature

°C



Humidity

%



How many people are in the room?

What else is happening?

Temperature:

- **Cold**
Less than 17°C
- **Cool**
17°C – 19°C
- **Fine**
20 – 22°C
- **Warm**
23 – 24°C
- **Hot**
More than 24°C

Humidity:

- **Dry**
Less than 30%
- **Fine**
30% – 65%
- **Wet**
65% – 85%
- **Very Wet**
More than 85%

About this worksheet: In the RCPCH RCP 2020 publication *The Inside Story: Health effects of indoor air quality on children and young people*, on page 15, #TeamCleanAir&Us said: "Children and young people want clear, factual and accessible information about what the potential harm is from poor indoor air quality and what we (children, young people, parents and carers) can do to avoid or reduce indoor air pollutants". Many of the Indoor Air Quality Working Party members were contributing authors to this publication and have produced these worksheets as a first step towards addressing this request from children and young people.



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Eating food

Location/room

Temperature °C

Humidity %

How many people
are in the room?

What else is
happening?

Playing

Location/room

Temperature °C

Humidity %

How many people
are in the room?

What else is
happening?

Brushing teeth or after having a shower or bath

Location/room

Temperature °C

Humidity %

How many people
are in the room?

What else is
happening?

You pick:

Location/room


Temperature °C

Humidity %

How many people
are in the room?

What else is
happening?


Temperature:

 **Cold**
Less than 17°C


 **Cool**
17°C – 19°C


 **Fine**
20 – 22°C


 **Warm**
23 – 24°C

 **Hot**
More than 24°C

Humidity:

 **Dry**
Less than 30%

 **Fine**
30% – 65%

 **Wet**
65% – 85%

 **Very Wet**
More than 85%

What did you find? You could think about which room was the warmest and coldest, were there any activities that seemed to change the humidity?