

Frequently Asked Questions

Activity 4 – how hot or cold do you feel?

General questions

What is 'thermal comfort'?

Thermal comfort is defined as: *'that condition of mind which expresses satisfaction with the thermal environment.'*

In other words, if you feel neither warm nor cold you are in thermal comfort. This is obviously highly personal, and can vary considerably from one person to another. But there are six major factors that will influence how hot or cold you may feel:

- Air temperature
- Radiant temperature, which is the heat from the sun, but also heat coming off buildings, cars, objects, the ground etc
- Wind - the stronger the wind the cooler it will feel in general
- Humidity - a cold day might feel even colder if it is damp, while a hot day might feel even hotter if it is very humid
- Clothing insulation
- Metabolic heat, which is the heat generated by our bodies - your metabolic heat output will be large if you are doing strenuous exercise and small if you are at complete rest.

How does the experiment work?

This experiment asks people some simple questions about their perceptions and preferences of the current weather conditions and environment they are in to measure the human responses to weather and climate.

What's the point of the activity, why should the public do it?

In this experiment by taking a survey of as many people as possible, under a range of different weather conditions we can hopefully understand how important some of the different components listed above are, and whether these change from place to place across the country. This will provide a measure of how adaptable the UK population are to their local climate.

What has this got to do with climate change?

We know from existing research that populations in different parts of the world adapt to their local climate. This means that the temperature range that is comfortable for people in Spain or Morocco will be different to those in Finland or Norway for example. So the climate we are used to shapes how the weather affects us (acclimatisation). This may also be true for the UK where the climate of Newcastle is very different from that of Bournemouth say.

Climate change is very likely to result in our winters and summers becoming warmer. But what will this mean for people in the UK? How adaptable are we to these climate

changes? Before we can answer some of these questions we need to look at how well adapted we are to our current climate.

Practical questions

Why are the categories only “very hot/very cold” or “warm/cool” I think I am somewhere between?

The survey uses a simple 5 point scale, so choose the answer you think is closest. Don't agonise too much. The very hot and very cold categories mean that you are more likely to feel uncomfortable if you were to spend too long in these conditions.

Surely we would all like it be warmer and sunnier?

This question refers specifically to your preference compared to the conditions at the time and in the specific location when you are doing the survey rather than a general preference. If it is a clear blue sky where you are for example it would be difficult for it to be any sunnier (less cloudy).

It may well be that there are very strong preferences, but with enough surveys it will be possible to look for regional variations in those.

I can't find my clothing in the options available?

It is not possible to provide a list of every possible outfit or combination of clothes. These are general categories so just try and find what comes closest to matching the overall number of layers of clothing you are wearing.

Why do you need to know about my age, sex, and home?

This is optional, and we only ask for some basic information to cover broad age band, sex, and general area that you originate from so that it will be possible to see if there are any differences in thermal comfort for different age bands, or between men and women, or between local residents and visitors.