What is Consciousness?

The best way to begin is with examples rather than definitions.

Imagine the difference between having a tooth drilled without a local anaesthetic...

...and having it drilled with one...

The difference is that the anaesthetic removes the conscious pain...

Assuming the anaesthetic works!

Again, think of the difference between having your eyes open and having them shut...
When you shut your eyes, what disappears is your conscious visual experience.
Sometimes consciousness is explained as the difference between being awake and being asleep. But this is not quite right.

Dreams are sequences of conscious experiences, even if these experiences are normally less coherent than waking experiences.
Indeed, dream experiences, especially in nightmares or fantasies, can consciously be very intense, despite their lack of coherence – or sometimes because of this lack.

Consciousness is what we lose when we fall into a dreamless sleep or undergo a total anaesthetic.
The Indefinability of Consciousness

The reason for starting with examples rather than definitions is that no objective, scientific definition seems able to capture the essence of consciousness.

For example, suppose we try to define consciousness in terms of some characteristic psychological role that all conscious states play — in influencing decisions, perhaps, or in conveying information about our surroundings.

Or we might try to pick out conscious states directly in physical terms, as involving the presence of certain kinds of chemicals in the brain, say.
Any such attempted objective definition seems to leave out the essential ingredient. Such definitions fail to explain why conscious states feel a certain way.

Imagine a computer-brained robot whose internal states register “information” about the world and influence the robot’s “decisions”. Such design specifications alone don’t seem to guarantee that the robot will have any real feelings.

The lights may be on, but is anyone at home?
The same point applies even if we specify precise chemical and physical ingredients for making the robot.

There is something ineffable about the felt nature of consciousness. We can point to this subjective element with the help of examples. But it seems to escape any attempt at objective definition.
Louis Armstrong (some say it was Fats Waller) was once asked to define jazz.

*Man, if you gotta ask, you're never gonna know.*

*We can say the same about attempts to define consciousness.*
What is it Like to be a Bat?

When we talk about conscious mental states, like pains, or visual experiences, or dreams, we often run together subjective and objective conceptions of these states. We don't stop to specify whether we mean to be talking about the subjective feelings — what it is like to have the experience — or the objective features of psychological role and physical make-up.

It usually doesn't matter, given that the two sides always go together in humans.

If not in robots.

Even so, these two sides can always be distinguished. This is the point of the American philosopher Thomas Nagel's famous question: "What is it like to be a bat?"
Most bats find their way about by echo-location. They emit bursts of high-pitched sound and use the echoes to figure out the location of physical objects. So the intent of Nagel’s question is: “What is it like for bats to sense objects by echo-location?”

It must be like living in the dark, spending a lot of time hanging upside down, and hearing a barrage of high-pitched noises.

But this is unlikely.

That’s perhaps what it would be like for humans to live as bats do.

But for bats, to whom echo-location comes naturally, it is presumably not sounds they are aware of, but physical objects – just as vision makes humans aware of physical objects, not light waves.
But still, what is it like for bats to sense physical objects? Do they sense them as being bright or dark or coloured? Or do they rather sense them as having some kind of sonic texture? Do they even sense shapes as we do?

We can’t answer these questions. We don’t have a clue about what it is like to be a bat.

In raising his question, Nagel does not want to suggest that bats lack consciousness. He takes bats to be normal mammals, and as such just as likely to be conscious as cats and dogs. Rather, he wants to force us to distinguish between the two conceptions of conscious experiences, **objective** and **subjective**.
When we think about humans, we don't normally bother about Nagel's distinction. We usually think of human consciousness simultaneously in subjective and objective terms — both in terms of how it feels and in terms of objectively identifiable goings-on in the brain.

The bats, however, force us to notice the distinction, precisely because we don't have any subjective grasp of bat sensations, despite having plenty of objective information about them.

*Science tells us a great deal about the bat’s brain.*

*But not what it is like to be a bat.*
Experience and Scientific Description

Nagel thus identifies something about experience that escapes scientific description. We lack this subjective something with bats, even after knowing everything science can tell us about them.

The moral then applies to conscious experiences in general.

Even though we normally run subjective and objective together, we should never forget that these can be distinguished.

And no amount of scientific description will convey a subjective grasp of conscious experiences.
How Does Consciousness Fit In?

The central problem of consciousness relates to mental states with a subjective aspect. In Nagel's words, these are states that are "like something". They are also sometimes called phenomenally conscious to emphasize their distinctive "what-its-likeness".

The big challenge is to explain how subjective or phenomenal consciousness fits into the objective world.

And in particular how it relates to scientific goings-on in the brain.

We face a number of choices at this point. Let's look at the three options that will emerge: dualist, materialist and mysterian.
The First Option: Dualist

Are the subjective features of conscious experience genuinely distinct from brain activities? This is a natural assumption. But this is a dualist line which then raises further questions.

*If the world contains subjective elements, then how do they interact with the normal physical entities which seem to fill up space and time?*

*And what yet unknown principles govern the emergence of these subjective elements?*
The Second Option: Materialist

An alternative is to deny that subjective mind and objective brain are as distinct as they appear to be. This materialist option is suspicious of the divergence between subjective and objective conceptions of the mind-brain. It insists on a unity behind the appearances.

The problem for materialism is to explain how mind and brain can possibly be identical.

If they appear so different.
The Third Option: Mysterian

Yet others despair of the problem and settle for the "mysterian" view that consciousness is a complete mystery.

We will examine these options more closely later. For the moment let us simply agree, in the terminology of the Australian philosopher David Chalmers, that explaining phenomenal consciousness is the "hard problem" of consciousness.
Hard and Easy Problems

Chalmers distinguishes between the "hard problem" and "easy problems" of consciousness. According to Chalmers, the easy problems concern the objective study of the brain.

At this level, we can ask about the causal roles played by different kinds of psychological states.

And about how these roles are implemented in the brains of different creatures.

Of course, these problems are only "easy" in a relative sense. They can pose real challenges to psychologists and physiologists. But they are "easy" in seeming soluble by straightforward scientific methods, and not raising any insurmountable philosophical obstacles.
So, for example, we might analyse pain as a state that is typically caused by bodily damage, and which typically causes a desire to avoid further damage.

Then we can investigate how pain is realized in humans by a system of A-fibre and C-fibre transmissions, and by different physiological systems in other animals.

Similar objective studies can be carried out for other psychological processes like vision, hearing, memory, and so on.
But none of this "easy" stuff, Chalmers points out, tells us anything at all about the feelings involved. Stories about causal roles and physical realizations will apply just as much to unfeeling robots as to throbbing, excited, itching human beings. The "hard problem" is to explain where the feelings come from — to explain phenomenal consciousness.
Another philosopher, the American Joseph Levine, calls this problem "the explanatory gap". Objective science can only take us so far. In psychology, as elsewhere, it can identify how different states function causally, and can figure out the mechanisms involved. But in psychology this doesn't seem to be enough. There is something else to explain.

Even after we have been told all about damage-avoiding states and A-fibres and C-fibres, we still want to say ...

There seems to be a gap here between what science can tell us and what we most want to explain.