Fluid dynamics

Have you heard of fluid dynamics? It's all part of the world's mechanics Liquid fills your body up to the brim We're not so out of place for a swim

The earth is mostly covered by water
This isn't something out of Harry Potter
And don't forget about the air that's all around
Yeah, that's a fluid too, keeps us safe and sound

So, what's important in the study of fluids? It's been studied all the way back since the Druids **Density** is the first thing we can discuss It's just the **mass** over the **volume**, no fuss

Now let's please talk about **viscosity**It's only apparent when there is a **velocity**The property describes the **internal friction**Which causes things to move with restriction

And now what's up next to bat?
Oh yeah, surface tension and all of that
Droplets in a spray are always round
Because the interface keeps them bound

Without **temperature** what does this all mean? For **fluid properties** it's like the Dean It affects everything mentioned before Yes, it's true, this isn't folklore

We're almost there, don't quit now Get on your computer and keep it highbrow Finally, the **simulations** can begin All the properties are modelled within

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x2

There are issues with models still today
One being showing **eddies** without delay **Turbulence** is what I'm talking about
It's difficult to show this without a doubt

Even with that snag it's time to brag We can start talking about **lift** and **drag** If we study some **aerofoils** in a flow We can get our planes ready to go

But that's not the only thing we can do boats, cars and weather to name a few So, don't dismiss fluid dynamics just yet That would be like ignoring the alphabet

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It's about showing how fluids flow
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Lyrics: Maxwell Brunhart, PhD student

The lyrics of the song "Fluid Dynamics" are part of a lesson plan which served as an outreach activity of the CaFE project in October 2019.

The CaFE project has received funding from the European Union Horizon 2020 Research and Innovation programme.
Grant Agreement No 642536