

Year 4 Science

Sound

LO – I can report my findings from enquiries.

www.grammarsaurus.co.uk

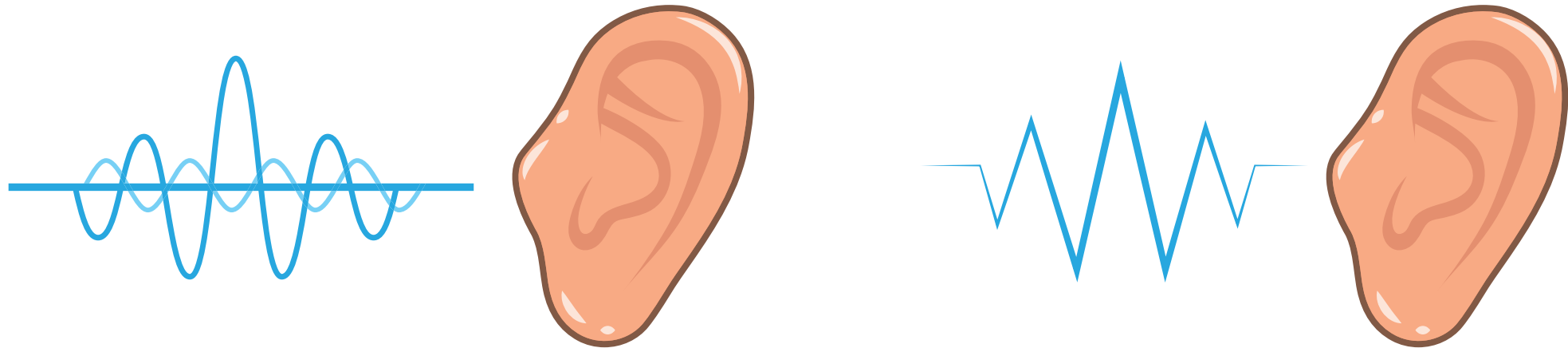


Grammarsaurus

Sounds

We have learnt that sounds are made when objects **vibrate**. The air makes the air around around vibrate, and the air vibrations enter your ear. You hear them as sounds.

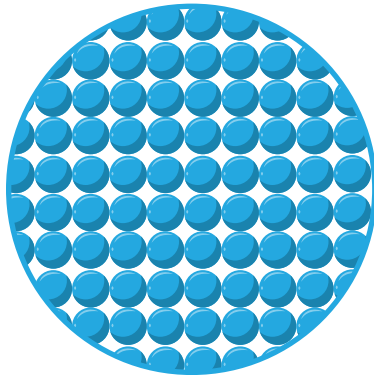
You cannot always see the vibrations, but if something is making a sound, some part of it is always vibrating.



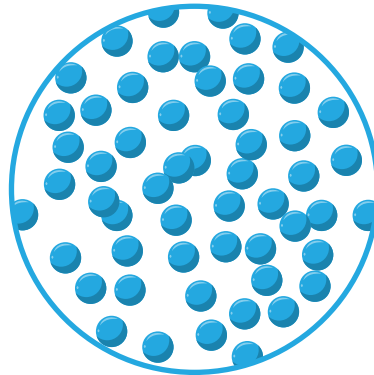
Travelling sounds...

We have also learnt that sound vibrations can travel through solids, liquids and gases.

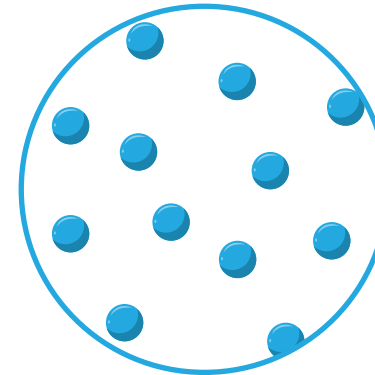
Vibrations actually travel faster through solids than the air because of the way their particles are packed together..



Solid



Liquid

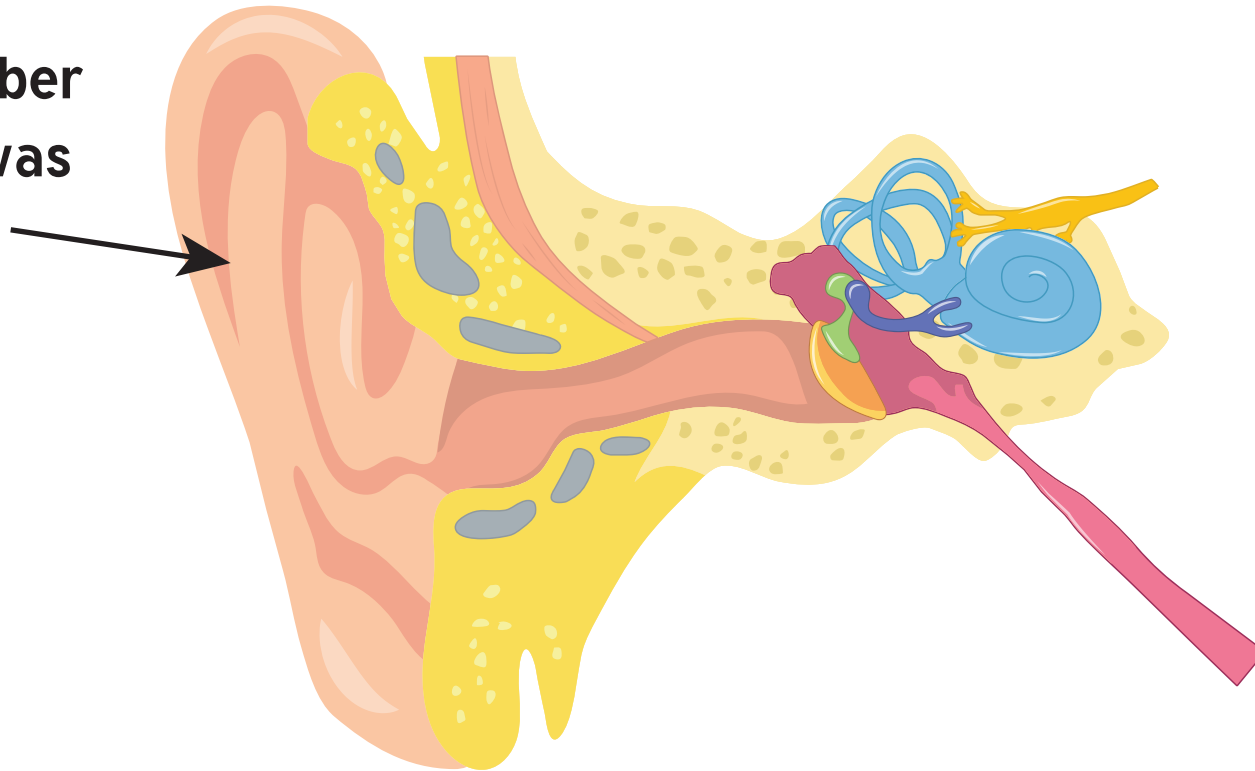


Gas

The Ear

Then we learnt about the different parts of the ear and how they all play an important part to help us hear sounds.

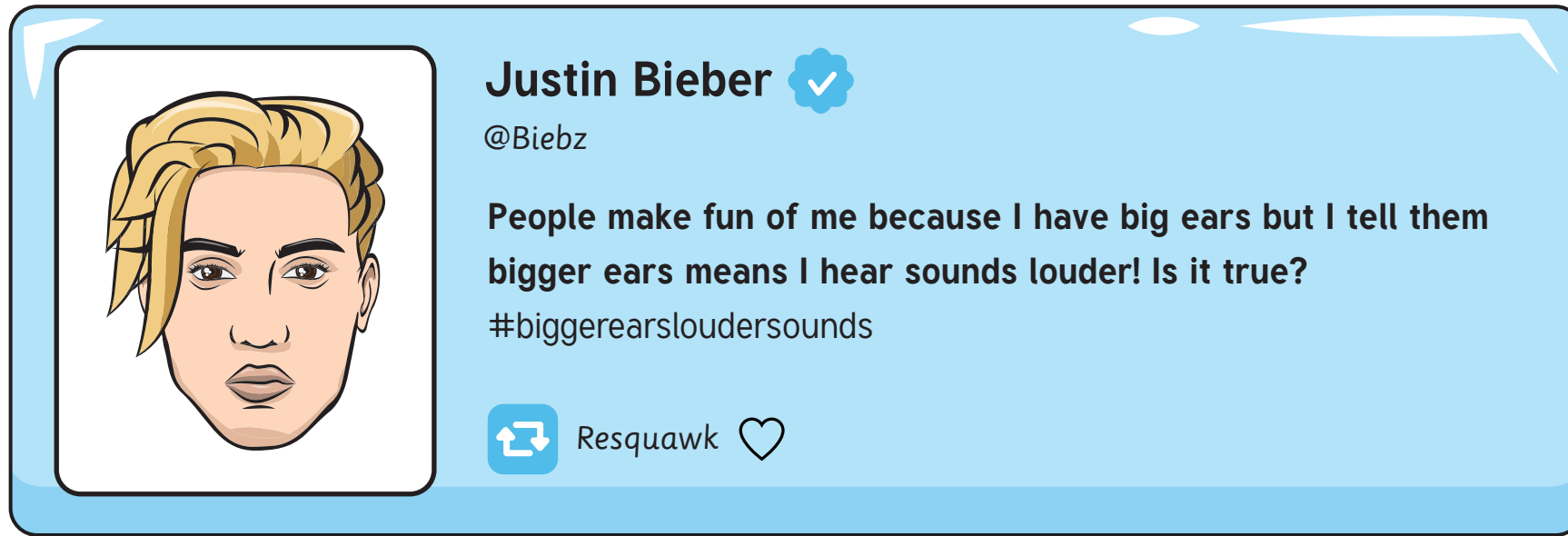
**Who can remember
what this part was
called?**



Pinnae

We have pinnae (ear flaps) on our ears to help catch the sound waves and direct them into our ear canal. If people have bigger pinnae then they will be able to catch more sound waves and direct them to their ear canals.

Justin Bieber squawked about this recently!





Investigation



Can we help Justin Bieber?

We need to plan an investigation to see if bigger pinnae means we hear sounds louder.

We could use paper or card to make ourselves bigger pinnae and see if it makes different sounds louder compared to our normal ears.

1. Plan out your investigation with your partner on your Investigation planning sheet.

Investigation Time

**Now is the time to carry out your
planned investigation!**



Communicate Results

Now that you have completed your investigation and gathered your data, we need to squawk Justin Bieber back to let him know whether he is correct or not!

Try to explain your results in as little words as possible.

You could even put a hashtag at the end!

#scienceiscool #welovescience





What did we find out?



Talk to the other people on your table about your results.

Did you all get the same results?

Which results were different?

Which results were the same?

Why do you think some of us have different results?

