



## Experiences and Outcomes:

SCN 0-11a	SCN 1-11a
SCN 0-12a	SCN 1-12b
SCN 0-20a	MNU 1-10c
	SCN 1-20a

## DYW link:

**Telecommunications engineers:** design and install equipment used for transmitting wired phone, cellular, cable, and broadband data. Their day-to-day responsibilities can include working with copper or fibre optic cabling, complex networks, and switching systems.

**Audio Engineer:** Also known as a sound engineer or recording engineer) helps to produce a recording or a live performance, balancing and adjusting sound sources using equalization and audio effects, mixing, reproduction, and reinforcement of sound.

## Resources required:

Styrofoam cups  
String  
Rice  
Water trough or large bucket of water  
Variety of different noise making items e.g cutlery, drums and tuning forks

## Activity/Challenge:

- Create an experiment to test if sound travels through gases, liquids and solids. Make telephones out of string and cups, listen above water to see if you can hear items being hit off each other under the water and put rice on top of a drum and see if it moves when the drum is hit. Feel the drum skin to help describe sound waves.
- How does whale blubber work as an insulator? Experiment with how long you can keep your hand in a tub of iced water. Then coat in Vaseline and see if can keep it under for longer. Time using a stopwatch and calculate the difference.