

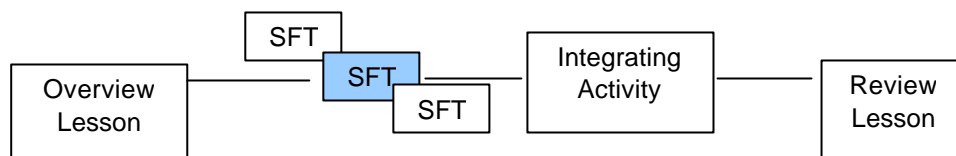
Learning objective: I can.....

Lesson 3 of 6

PoS

*Edit sound waves on the computer*

**QCA Unit: 3B**



## Resources

A sound sample, a computer with a sound card, wave cards, microphone (opt.)

**Software you could use:** windows sound recorder, audacity

**Support files:** sound sample.wav, wave cards.pdf,

## Setting the scene (10 mins)

Share the learning objective with the class. What if we wanted to only use some of the sound in a sample? How do we edit it? Have a line of children holding the soundcards representing the words "This is a sound sample, thank you" at the front of the class. Ask them to show their cards with the waveforms showing and say their words (on the back of the card) in sequence. Use a meter rule as the indicator of the progress. Repeat and stop it before thank you. Use the meter rule to make the children repeat only the last phrase, "thank you" a couple of times. Now make everyone to the left of the meter rule sit down so that all you are left with are the two words. We have just edited a sound sample, now show the process on the computer.

## Main Input (15 Mins)

Turn the computer on to reveal the sound sample the children have just been displaying. Play it. Position the indicator so that only "thank you" plays. In order to position the indicator you can use the shape of the sound waves to look for the pause. This works best using Audacity. In windows sound recorder you have to listen to the sample and try to stop it at the right place in real time. The sound sample given makes this easier as there is a pause before the "thank you". There is a time frame counter in windows sound recorder which helps but this can be quite fiddly for year 3. (you want to be positioned at about 2.80 secs on the sample provided)

Now delete the selection of the sample "before the current position". Play the new sample back a few times. Save as a new filename.

## Activity – short focused task (10 mins)

Children each edit the given sound sample down to two words.

Extension (15 mins) – children record their own samples of speaking or singing and save them They then switch seats with a partner who experiments making sound effects for a game by editing and transforming them. Save the changed sample as a new file name.

## Review and recall (10 mins)

Bring the class together and review the learning objective. Listen to some of the samples. Explain how some music uses sound samples like this, the samples coming in at certain times. (You could even play part of a song as an example) Have the class slowly count "1,2,3 ..." and then play the sample on the 4 beat. Repeat in a rhythm.

### Key questions to ask and to display:

Why might you want to crop a sound sample?

Once you have cropped and saved a sample, can you get the original sound back?

How can you spot a silence in a waveform?

### Vocabulary:

sound waves, .wav file, sample, cropping,

## Teaching Points:

Sound recorder has a slight delay in playing back samples, that is why it is best to have the children count slowly.

This whole lesson is better taught at year 5 as it then leads onto multimedia authoring in year 6, enabling the children to customize samples from the internet or themselves for inclusion in their presentations. Unfortunately the QCA SoW does not revisit sound again until KS3.

## Assessment Opportunities:

Listen to the samples. Did they manage to crop it correctly?

## What comes next:

Synthesized sound and Midi files.