

Sound & vision

How to make science explode across the curriculum...

Through six EdisonLearning Connected Curriculum themed units each year, pupils and teachers embark on new and challenging experiences that support learning across foundation subjects and science with relevant links to literacy and numeracy. These provide a wealth of opportunities to teach subjects within exciting and motivating contexts, mapped to cover the National Curriculum requirements. Each learning unit has one or two focus subjects, thus allowing the specialist area to be rigorously taught. The units also provide teachers with the flexibility to adapt learning experiences to meet the needs and interests of their class.

This issue, EdisonLearning is offering *Teach Primary* readers the opportunity to test the Connected Curriculum approach out for themselves using the Audio Visual unit. The complete teaching guide is available online at edisonlearning.net/free-sample, but for now we're going to give you taste of what this engaging learning unit involves.

Listen up

The Audio Visual unit focuses on science and it covers key areas of the National Curriculum such as reflection, vibration, sound insulation, pitch and loudness and how we see. However, as a quick glance at the unit overview reveals, there's plenty of scope for linking the main theme to many different subjects. In fact, more avenues of learning are suggested than can actually be pursued within the six weeks, but that's the point; teachers can mix and match depending on which areas children need to concentrate on and what is else they have planned during the year.

The Audio Visual unit is set in motion with a letter from the children's friend Edi.

Dear Sue

I hope you are keeping well. I am enjoying my job except that at my factory I work the night shift. It means that I have to go to bed when everyone else is at work. I don't mind but I am finding it very difficult to get to sleep because it is so light in my bedroom and my alarm clock ticks loudly which is very irritating.

I wondered if you have any ideas to help me to find a better way to block out the light and noise so I can sleep better.

I look forward to hearing from you.
All the best,
Edi

With the challenge set, the process of solving Edi's problem begins, building towards concrete outcomes such as writing a reply to Edi with advice, designing a set of noise reducing ear muffs and insulating the irritating alarm clock.

If they are to come up with adequate solutions, children must first learn more about sound, light and vision through a series of science investigations. For instance, pupils are asked to look into:

- How we hear and how we see.
- Which materials block out the light.
- Reflection and what can be seen using one and two mirrors.
- How sound travels through materials.

As children discover more about sound and vision, learning naturally branches off into other areas of the curriculum, such as:

1. ICT – recording data about sound

Children use data logging equipment to measure sound levels when conducting investigations.

2. Literacy – creative writing

Pupils can imagine they have always lived in a cave with no sounds and very little light. One day, they emerge into a forest, street, etc. What can they see and hear?

3. D&T – design and make ear muffs

Teams of children can be given a selection of materials and challenged to make practical and attractive ear muffs for Edi to sleep in.

4. Art & design – using shadows

Using an overhead projector, children draw around the shadow of the profile of each pupil. This forms the framework of a collage.

5. Homework – secret messages

At home, children write a secret message to a friend using a mirror. This can only be read using another mirror.

The precise direction that learning takes is down to the teacher and the pupils, but the guidance provided by the Connected Curriculum offers initial inspiration, cross curricular links and the reassurance that the National Curriculum is being covered in its entirety.



FREE RESOURCE
Download the complete Audio Visual unit from EdisonLearning at edisonlearning.net/free-sample