

## Overview

**Theme:** Traffic Jam!

**Purpose:** to raise awareness of traffic issues in Ware town centre/High Street

**Audience:** parents and local town councillors/ Hertfordshire Highways

The unit will revolve around the Town Centre and the traffic issues faced there. There will be some fieldwork in Ware town centre surveying traffic volumes passing through, impact of traffic lights/crossings and examining the key hotspots. OS maps will be used to explore map references and road routes. Children will explore the creation of battery powered vehicles- as toys and in modern road use. They will create their own moving/controllable vehicle using DT skills.

While the children are in the High Street, recordings should be made of the traffic sounds. These can then be replicated in the classroom using percussion instruments. A story of a traffic jam can then be created using sequencing of instruments and exploring different dynamics of music.

Through the unit gymnastics work will be focused on how exercise is beneficial through a travelling theme and science work will look at electricity and circuits with regard to traffic lights and switches. This will also link to computing where children will explore how to control traffic lights and the sequencing of them.

The data collected during the survey will give information for data presentation and interpretation in maths as evidence of the issues faced.

Literacy work will begin with reviewing news articles on the theme of traffic problems, analysing for features and language techniques used. News articles and reports will be written with the intention of telling people about the traffic problems in the town centre. The audience for these will be the local town council and Hertfordshire Highways.

**Visit/visitor opportunities:** Ware town centre for fieldwork, art and music.

Local town councillors, Hertfordshire Highways representatives, journalists from local newspapers

# Traffic Jam!

## PE

Gym: travelling

- Develop flexibility, strength, techniques, control and balance
- Compare performances with previous ones and demonstrate improvements to achieve their personal best
- Different methods of travel; avoiding obstacles; how to overcome obstacles; simple sequences; perform, record and review; improve.

## Science

Electricity and how traffic lights work

- Compare and give reasons for variations in how components function: brightness of bulbs, loudness of buzzers; on/off switches; symbols
  - reporting and presenting findings from enquiries
  - Number and voltage of cells
- Make simple circuit, include switches in circuits.  
Series and parallel circuits

## Music

Traffic sounds. Traffic jam story along the High St.

- Play and perform in solo and ensemble contexts; playing instruments with increasing accuracy
  - Improve music for a range of purposes
- Explore instruments and sounds made; how to play instruments; compare and evaluate sounds and performances explore recorded sounds and attempt to recreate them; compare and evaluate performances; improve performances

## MFL

Ware

- describe people, places, things and actions orally and in writing
  - present ideas and information orally
- Where we live; directions; shops; streets; school

## English

Journalistic writing- reports on the state of the High Street with traffic

- identifying and discussing themes and conventions in and across a wide range of writing
  - ask relevant questions
  - articulate and justify answers
  - participate in presentations
  - summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
  - identifying how language, structure and presentation contribute to meaning
  - distinguish between statements of fact and opinion
  - retrieve, record and present information from non-fiction
  - plan writing- audience and purpose, form, using models
  - draft writing, using organisational and presentational devices; indicate grammatical features; formal writing vocabulary and structures
  - evaluate and edit; tenses, subject and verb agreement, reported speech
  - proof read
- Reading newspaper reports, compare written news to spoken news, analyse features, using reported speech, formal writing, writing reports, editing, improving, presenting.

## Geography

Field work- traffic survey, volumes of traffic, directions of travel.

- use maps to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (incl on OS maps) to build knowledge of the UK
- use fieldwork to observe, measure, record and present the human features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies
- describe and understand key aspects of human geography, including land use

Reading maps; OS maps and symbols; locate Ware- physical and human features; transport links; plan groups and purpose of surveys; learn how to do traffic data collection and plan for own; collect data; present and interpret data and findings.

## DT

Moving/controllable vehicles

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
  - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams
  - select from and use a wider range of tools and equipment to perform practical tasks accurately
  - select from and use a wider range of materials and components according to functional properties
  - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
  - understand how key events and individuals in design ad technology have helped shape the world
  - understand and use electrical systems in their products
- Explore battery powered vehicles; Sinclair C5 design and innovation; battery use in modern cars; design own; choose materials; build and adjust; evaluate.

## Maths

Data collection and interpretation from traffic survey incl mean median mode. Compass directions.

- use, read, write and convert between standard units, converting measurements of length, from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places (DT link)
- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

Interpreting data in various forms. Teach to interpret line graphs and pie charts including fractions or percentages of totals. Planning data collections. How to construct line graphs/pie charts to show data collected . Averages for data sets and concluding statements.

## Computing

Controlling devices, lights, timers, Probots

- use sequence, selection and repetition in programs; work with variables and various forms of input and output
- design write and debug programs that accomplish specific goals, including controlling or simulating physical systems

Recap logo sequencing. Use Probots to sequence moving vehicle. Write and test programs. Move onto using inputs with Lego robots.

**History**

Not taught

**Art**

Not taught