

Topic based resource

Transport

Upper Key Stage 2

Eco-Schools



Ariennir gan
Lywodraeth Cymru
Funded by
Welsh Government



cadwch keep
gymru'n wales
daclus tidy

Background information

All over the world people use different methods of transport, including walking, cars, cycling, buses, taxis, community transport, trains, trucks and vans, boats, and aeroplanes. Whether it is to get us to school, work or the shops, to go on holiday or visit friends and family or to move daily necessities like food and clothes and other goods from one place to another, we rely on transport to keep our lives moving. The transport infrastructure includes roads, cycle paths and cycle lanes, railway lines and stations, ports, harbours, and airports which need to be maintained and updated to ensure they remain fit for purpose and efficient.



Climate perspective

Burning fossil fuels to power our vehicles is responsible for the release of greenhouse gases which significantly contributes to climate change. As private car ownership has become cheaper and more accessible, the volume of traffic on our roads has increased. Transport is responsible for 17% of carbon emissions in Wales, with private car use responsible for more than half.

Emissions from vehicles contributes significantly to air pollution which is real challenge to the health of the population, with the vulnerable in society among those at the highest risk from air

pollution, damaging quality of life and even shortening life spans for some.

The Welsh Government's 'New Wales Transport Strategy' takes into consideration the duties on the Government to address the needs of future generations and the environment. Its vision is to provide 'an accessible, sustainable and efficient transport system,' and it pledges to increase the number of people using public transport, walking and cycling as well as reducing the need to rely on private car use to achieve the Zero Waste Nation target by 2050.

Human Bar Chart

Upper Key Stage 2

How do we travel to school?

The Eco-Schools School Transport Survey and resulting Travel Plan are an important part of evaluating your school and community travel situation, to highlight any issues and find sustainable solutions. This activity is a practical way to use real life maths to involve children in gathering and interpreting the data.

Materials needed:

- Playground lines (netball court or similar) or 2 lengths of rope
- Whole school Travel Survey Results/data on how each class in the school and staff travel to school
- PE cones or rubber spots
- Playground Chalks
- Transport signs to show how children get to school – walk, bus, car, bike, taxi, train
- Large number cards/large number outlines/scrap paper and marker pen

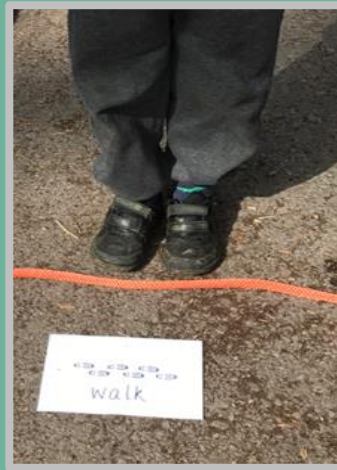


Step 1



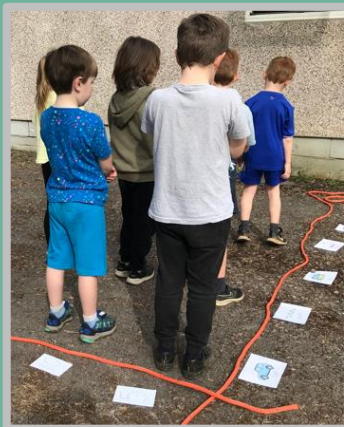
Lay out lengths of rope to create right angle/axis for bar chart/pictogram or find place where playground markings meet at a right angle.

Step 2



Ask children to form a line behind each mode of transport picture on the horizontal axis to indicate how they get to school. Ask the children to sit down if practical so they can see what is happening more easily.

Step 3



Count the children in each column/line together and put down (or write with chalk) the corresponding number next to the vertical axis. See if the children can predict which mode of transport will have the most or least. Ensure the children are evenly spaced and in line with a number and mode of transport.

Step 4



Give each child a spot or cone and ask them to put it next to their feet. Alternatively you could give each child a chalk to draw around their feet to leave a circle on the playground to mark their place. A row at a time ask the children to carefully move away from the chart and you should have a visual representation

to use to ask the children questions about how they travel to school. Which is most/least used method of transport and why?

Repeat with a different, larger set of data, e.g. all classes in the year group/key stage/school or staff to create the opportunity to work out use of different scale e.g. 1 child on the bar chart represents 5 children from the data. You could also split children into groups to work out their own way of representing the data. Could they create a pie chart or line graph to show other aspects of the data from the Transport Survey or to demonstrate carbon emissions data? Remember to take photos or make a video to add to your Eco-Schools action plan evidence.

Step 5

Discuss how the children get to school, which modes of transport are more environmentally friendly and why. Bear in mind that children may not have any choice, but if they could choose which option might be best for them (physical health, safety, financially and for the environment.)

Follow up discussion

Discuss the use of private cars and how short, local journeys contribute considerably to carbon emissions and air pollution. How can you encourage the school and wider community to change the type of transport they use, to walk short journeys instead of driving and to shop locally rather than driving out of town? Ask the children to record their ideas about sustainable travel using a mindmap - think about health benefits of physical exercise and better air quality, environmental benefits of less fossil fuels being burned so less carbon emissions, safer roads for children travelling to school, financial benefits for families not using the car and so on.

Curriculum Links

Area of Learning and Experience - Mathematics and Numeracy

Statement of what matters:

Statistics represent data, probability models chance, and both support informed inferences and decisions

The number system is used to represent and compare relationships between numbers and quantities.

Area of Learning and Experience - Humanities

Statement of what matters:

Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action.

Area of Learning and Experience - Health and Wellbeing

Statement of what matters:

Our decision-making impact on the quality of our lives and the lives of others

Next steps and other ideas

- Map children's journey to school
- Organise a walk to school week event
- Make a poster, leaflet, or video to encourage active travel to school – walking, cycling or scooting

- Hold a bike maintenance workshop
- Plan cycling proficiency sessions in school
- Hold road safety lessons
- Organise a walking bus
- Ask children, parents, and school staff to pledge to walk, cycle or scoot to school a few days a week

