

Bike To School Week 2017

Teacher resources pack

England & Wales:

education@sustrans.org.uk

0117 9150207

Sustrans
2 Cathedral Square,
College Green,
Bristol, BS1 5DD

www.sustrans.org.uk/teachers

Northern Ireland

schoolsNI@sustrans.org.uk

028 9043 4569

Sustrans
Ground Floor,
Premier Business Centres,
20 Adelaide Street,
Belfast, BT2 8GD

Sustrans is the charity making it easier for people to walk and cycle.

We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute. Join us on our journey. www.sustrans.org.uk

© Sustrans May 2017. Sustrans is a registered charity in Scotland (SCO39263) and in England and Wales (326550).



1

Bike To School Week 2017

My journey to school



Time needed:

15-20 minutes



Resources needed:

Pencil, paper/copy of
storyboard



Solo/group activity:

Both!

Objective:

Pupils think about their journey to school
and discuss their experiences.



Session plan:

Ask the pupils to draw a storyboard of their journey to school – you can copy the version overleaf to give to pupils.

They start with their house in the first square and end with school in the last one. When all pupils have finished, ask them to write down how they travelled to school.

Ask the pupils to compare drawings in their groups.

Which part of the journey do they like/dislike?
Ask them to put a traffic light in the corner of each of the squares representing how they feel.

Ask them to count how many 'Greens' and 'Reds' they have. What is the score? What is the class score?

Ask the pupils to complete the following statements and discuss as a class or in groups.

- The BEST part of my journey is...
- The WORST part of my journey is...
- My FAVOURITE PLACE in my local area is... because...

Taken from:

The Big Street Survey, our curriculum resource which enables pupils to investigate the area around their school and create a manifesto on how to make their streets safer and greener.

Working both inside and outside the classroom, the Big Street Survey meets numerous curriculum objectives, with various cross-curriculum opportunities and lesson plans for each of the devolved nations.



My journey to school



Home

Empty rectangular box for drawing the first part of the journey.

Empty rectangular box for drawing the second part of the journey.

Empty rectangular box for drawing the third part of the journey.

Empty rectangular box for drawing the fourth part of the journey.

Empty rectangular box for drawing the fifth part of the journey.

Empty rectangular box for drawing the sixth part of the journey.



School

Bike To School Week 2017

Traffic survey



Time needed:

10-15 minutes
AM & PM



Resources needed:

Pencil, copy of
table (overleaf)



Solo/group activity:

Solo

Objective:

Pupils will recognise the impact of travel and transport on their local environment



Session plan:

Pupils think/pair/share the ways in which they and others travel to school. Ideas are listed on a whiteboard and then shared to create a class list.

Discuss the positives and negatives associated with those modes of transport in small groups.

Introduce the idea of vehicle congestion to the class. Show pupils images/video of traffic outside of school before/after the school day.

Ask pupils to estimate the number of different vehicles that drop off pupils in the morning or collect pupils in the afternoon.

Pupils use a simple table, like the one shown overleaf, to record the type and number of vehicles that arrive at school at drop off and pick up times.

Analyse data with the class. What is the most popular? Least popular? Why?

What could we do to change the number of pupils travelling actively? Introduce Big Shift as an online class challenge.



Taken from:

Sustrans' Learning Journey sets out a curriculum to introduce knowledge and skills that will develop lifelong active travel habits in young people.

The Learning Journey is a curriculum map made up of five routes, each with a different theme. The themes are:

- Developing Skills
- Journey Planning
- Safety Awareness
- Benefits of Being Active
- Understanding Equipment

Bike To School Week 2017

Calories, carbon & calculators



Time needed:

20 minutes



Resources needed:

Calculator, pencil, paper



Solo/group activity:

Both!

Objective:

Pupils understand how their travel can affect their health and the environment, in terms of carbon emissions and calories burned.

Survey:

_____ Cycle

_____ Walk

_____ Scoot/skate

_____ Park and Stride/Park and Cycle

_____ Bus

_____ Train/Other Rail

_____ Car

_____ Absent

Instructions:

Complete a survey of how pupils in your class travel to school, using the form above.

Pupils can also work out how much they could save in carbon emissions, using these figures:

Pupils then work out how many calories they would burn off if they travelled to school by bike, foot or scooter instead of in a car. You can base your calculations on these figures:



Bike = 563 calories per hour

Scooter = 246 calories per hour

Walk = 246 calories per hour



Cars emit 0.30 kilograms of CO₂/mile



Buses emit 0.18 kilograms of CO₂/mile per passenger



Trains emit 0.08 kilograms of CO₂/mile per passenger

Please note: Calories expended depend on numerous factors, including mass, fitness and terrain. Carbon emissions can vary according to specific types of vehicle, such as a small or large car. The figures used above are based on certain averages and you can use them as the starting point for further investigation.

Taken from:

Sustrans' Big Shift, a free-to-access online challenge designed to motivate the school community to travel more actively. The challenge sets the school individual targets based on how pupils currently travel to school, helping them make a Small Step, Big Stride or Giant Leap to increasing active travel.

www.sustrans.org.uk/bigshift www.bigshiftcymru.sustrans.org.uk



Bike To School Week 2017

Finger on the pulse



Time needed:

20-30 minutes



Resources needed:

Pencil, paper



Solo/group activity:

Pairs & group

Objective: Pupils will learn about the effect of activity on the heart.

Session plan:

Tell pupils that they will be investigating our heart rate. Start by helping pupils find their pulse on their left wrist, just beneath the thumb.

Pupils work in pairs, one counts their pulse whilst the other times 15 seconds on a watch. Multiply by four to get beats per minute. Record and swap roles.

Next, repeat the measurements immediately after one minute of an activity that makes pupils slightly out of breath (eg a short bike ride or running on the spot) and record, before resting completely for two minutes and recording a third pulse rate.

Compare measurements. How do they differ?

Do pupils know that the heart is a muscle that pumps blood and oxygen round the body? Explain that a slower resting heart rate suggests a stronger heart, as it can pump more blood with one contraction. Why does activity raise the heart rate?

Discuss the findings. Why is it better for the heart rate to get close to normal quickly after exercise? What happens to the heart if we do more activity and what changes to the results would we expect after several weeks of increased activity?

Chart the pupils' heart rates. Who had the highest or lowest after exercise, whose was the lowest to start with and whose recovered the fastest?



Taken from:

Suss it Out, a set of five themed worksheets, each with 10-, 20- and 30-minute simple, snappy activities to inspire action and discussion on active travel. These can easily be fitted into any part of a busy school day with no special resources or preparation necessary.

The areas covered are Being Healthy, Exploring, Looking After Your World, Staying Safe and Future Journeys.

5



Bike To School Week 2017



Get going



Time needed:

20-30 minutes



Resources needed:

Pencil, paper



Solo/group activity:

Pairs & group

Objective:

Pupils develop practical skills and learn how to make cycling and scooting safer with simple checks and practices.

Session plan:

Many young people don't scoot and cycle because they or their parents are unsure of the condition of their scooters and bikes.

Show the pupils Sustrans' M-check video for bikes and L-check for scooters, to help make sure these are roadworthy each time they ride. The scooter video also includes simple guidance for scooting.

The M-check video is available at tinyurl.com/safetoride (this video is three minutes and 30 seconds long).

The L-check and scooter skills video is available at tinyurl.com/scooterskills (the L-check ends at three minutes in the video, the skills section is another 10 minutes).

Print out the Safe To Ride Get Going and Start Scooting sheets. Pupils can take these home to discuss with their parents or carers and for checking their own scooters and bikes.



Taken from:

Get Going, a series of practical information sheets and videos to help you develop bike and scooter skills. This also includes how to mend a puncture, cycling in winter and learning to ride without stabilisers in just 30 minutes.

www.sustrans.org.uk/M-Check

