

TOP-CLASS TRANSPORT



HI THERE! IT'S MADDISON FROM THE GEOSQUAD HERE, AND I HEARD YOU'VE BEEN HAVING A NOSY AROUND MY OWN, PERSONAL STOMPING GROUND -- MIDDLETOWN! SPECIFICALLY, YOU'VE BEEN LOOKING AT ALL THE DIFFERENT WAYS PEOPLE GET AROUND THE PLACE. SURVEYORS HAVE WORKED WITH ENGINEERS AND BUILDERS TO PLAN OUT AND BUILD ROADS, PATHS, RAIL LINES, AND EVEN AIRPORTS -- ALL OF WHICH MAKE FOR TOP-CLASS TRANSPORT! BUT WHAT ABOUT THE FUTURE OF TRAVEL IN MIDDLETOWN? THAT'S WHERE YOU COME IN! I NEED YOUR HELP TO FIGURE OUT HOW PEOPLE MIGHT GET AROUND IN YEARS TO COME. LET'S GET A MOVE ON!



TASK 1: QUICK QUIZ

(LITERACY LINKS - RETRIEVE, RECORD AND PRESENT INFORMATION FROM NON-FICTION / HISTORY OBJECTIVES - SIGNIFICANT EVENTS AND TURNING POINTS)

If we're going to figure out where we're going, we have to know where we've been! Use your research skills to find the answers to the following questions, all about the history of transport:

1. When did the first railway line in Britain open?
2. What is the length of the longest paved runway in the world?
3. How many passengers can fit in the Youngman JNP6280G Bus, one of the largest buses in history?
4. Which city has the most taxi cabs?
5. What is the top speed of the SNCF TGV POS - the fastest commuter train in the world?
6. How many lanes are there on the 'Katy Freeway', the world's widest highway?
7. How many stations are there on the London Underground?
8. What is the height of the Tanggula Pass, the highest railway in the world?

TASK 2: YOU'VE LEARNED TO WALK, NOW WALK TO LEARN!

(GEOGRAPHY OBJECTIVES - PHYSICAL GEOGRAPHY / LOCATIONAL KNOWLEDGE - LITERACY OBJECTIVES - PERSUASIVE WRITING)

One reason surveyors work so hard to help create alternative ways to get around is so that people don't have to rely on one particular mode of transport. Surveyors help to plan out things like cycle paths, bus lanes, railway lines and other pathways, so that people have a choice for transportation beyond a car. This can also help people to reduce their carbon footprint, as they can use public transport (e.g. trains and buses) or emission-free travel (cycling, walking, skating etc.) to move around in a more eco-friendly way.

The 'Living Streets' organisation was founded to encourage people to do exactly that! Their mission is to have more people choose

walking for local journeys, and to improve the quality of the paths where people walk. They even have a special walk-to-school initiative - the WOW Challenge - where you can track your travel to school and earn badges for racking up those steps!

Your challenge: create a poster encouraging children to try and walk to school. It should be bright and attention-grabbing, but it should also include some important details, such as the advantages of walking to school. You could think about environmental benefits, health benefits, financial benefits, and any other plus-points that might come of making the effort to walk to school. Have a look at the Living Streets website to help you with ideas!



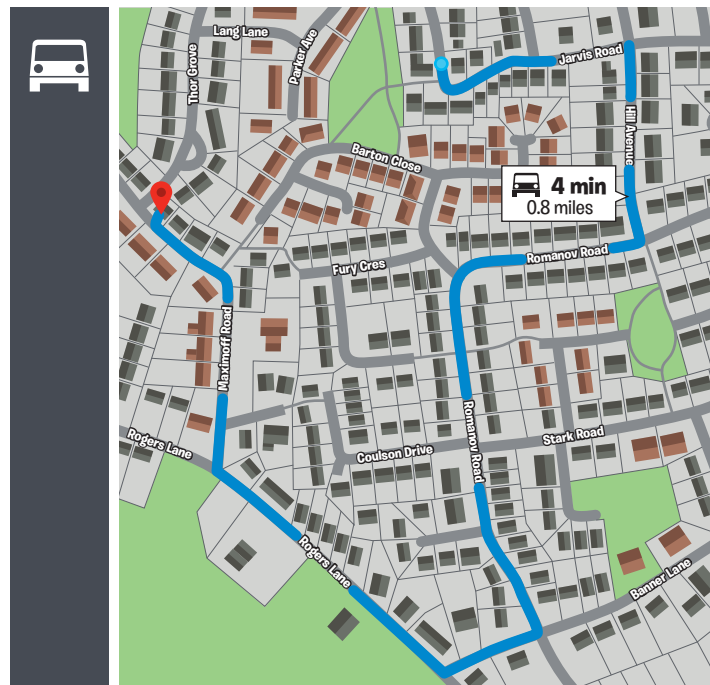
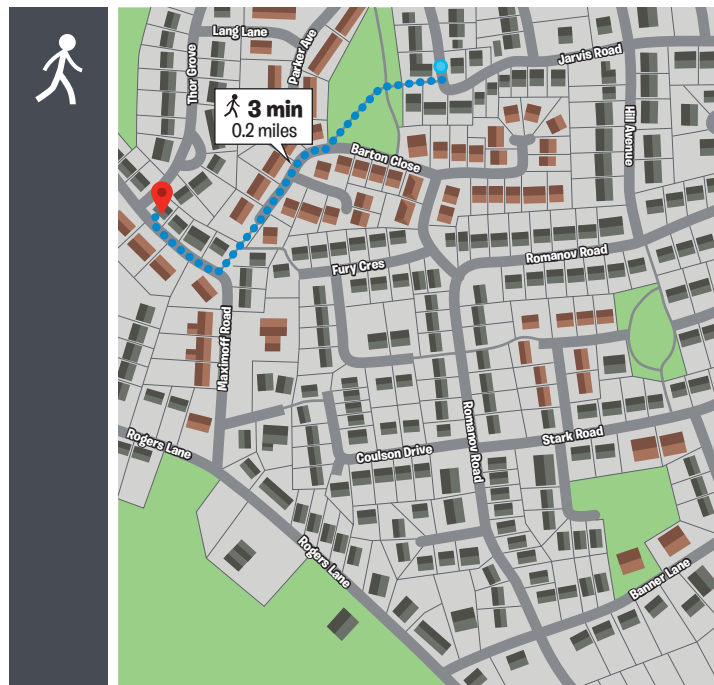
TASK 3:

HUMAN SAT NAV - BEAT THE CAR!

(GEOGRAPHY OBJECTIVES - LOCATIONAL KNOWLEDGE / GEOGRAPHICAL KNOWLEDGE AND FIELDWORK)

Just like Middletown, your local area will have special pedestrian-only pathways. Sometimes - particularly for short journeys - these routes

can provide handy shortcuts for walkers; so much so that, on occasion, they make it possible to be faster than a car! Look at these two maps:



Both journeys start at the same location, and end at the same goal. However, thanks to a handy pathway, it's possible for a person to walk this journey faster than a car could drive it! The car has to follow a long, windy route, whereas the walker can follow a simple course, with only one turn!

Your challenge: think of the pedestrian pathways around your local area and see if you can use an online mapping site to plan out a route where a walker could beat a car! Once you have found one, write a set of instructions for both the driver and the walker, using accurate positional language and measurements.

TASK 4:

TRANSPORT TOP TRUMPS

(GEOGRAPHY OBJECTIVES - HUMAN AND PHYSICAL GEOGRAPHY)

As you can see from the exploration poster, there are a lot of ways to get around besides cars, buses and trains. But which way is the best way? On the paths of Middletown you could find walkers, runners, scooter riders, skateboarders, roller-skaters, cyclists, and horse-back riders. In order to decide which mode of transport tops the list, you'll need to be able to compare them using the same criteria.

Your challenge: using this example as a template, create a 'Top Trumps' style info card for each method of transport, giving them a rating from one to five in the following areas:

SPEED SAFETY COMFORT EXERCISE

Use these cards to compare the various ways of getting around and decide which one comes out top!



TASK 5:

THE VEHICLE OF THE FUTURE

(GEOGRAPHY OBJECTIVES - GEOGRAPHICAL KNOWLEDGE AND FIELDWORK /
D&T OBJECTIVES - DESIGN, MAKE, EVALUATE AND TECHNICAL KNOWLEDGE)

The first question on the exploration poster demonstrated the means by which people can travel: land, water or air. The problem is, most modes of transport only work in one of those areas. For example, a car will work brilliantly on the road, but if you tried to drive your average automobile down a river, you wouldn't get very far! Helicopters can flit through the skies with ease, but they wouldn't be much use if you wanted to squeeze one down a residential road! It seems like most vehicles are destined to be stuck on one, fixed path, whether that be on the ground, in the water, or in the air...

But does it have to be this way? Might it be possible to design a vehicle that could fly through the sky, but can also deploy wheels so it can use the road... and is waterproof, with the means to propel itself down a river... and has a special set of wheels that fits to a railway track, so that it can make use of a train line!?

Your challenge: design a vehicle that can travel over land, water, AND air! Make sure your design is thoroughly labelled, including explanations of all the special features you have given it so that it can travel absolutely anywhere!

