



Girlguiding
Scotland



Active Adventures

Introduction

Welcome to Active Adventures, our active travel challenge created in partnership with Sustrans Scotland!

This challenge is all about active travel – using active ways, like walking, cycling, scooting or wheeling, to get to the places we need to go.

There are 4 different sections in this badge, through which you will learn about active travel and develop skills to help you travel actively more often.



A bit about Sustrans

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

They connect people and places, create liveable neighbourhoods, and transform the school run and commute.

They do this because it leads to happier people, stronger communities, and a greener local environment. Sustrans would love you to share your **#ActiveAdventures** and tag [@SustransScotland on Facebook](#) and [@SustransScot on Twitter \(X\)](#)



Join the movement. www.sustrans.org.uk

How does it work?

To successfully complete the challenge, each group should try to complete the following number of activities. Leaders can choose a different range of activities if they don't have access to bikes or scooters and somewhere to use them.

Rainbows	5 activities	1 activity from each section + the final activity
Brownies	6 activities	At least 1 activity from each section + the final activity
Guides	7 activities	At least 1 activity from each section + the final activity
Rangers	7 activities	At least 1 activity from each section + the final activity

The summary table on the next page shows the 4 sections and the activities in each. Each activity is marked as suitable for Rainbows, Brownies, Guides or Rangers, but leaders are welcome to use any activity they feel is suitable.

Leaders may want to invite visitors to help them deliver the activities in this pack – this could be experts, enthusiasts, parents or leaders from other units who are confident on the topics covered. Be sure to follow [Girlguiding's guidance for inviting visitors to your meetings](#).

If you have any questions, please feel free to get in touch with us on web@girlguiding-scot.org.uk

Summary table

Use this handy table of activities to help you plan with your unit. While we have suggested which activities might be most suitable for your section, you know your unit best! You are welcome to do any of the activities and adapt them for your unit as you see fit.

	Rainbows	Brownies	Guides	Rangers
Starting your adventure				
1. Adventure kit	x	x		
2. Scavenger hunt	x	x		
3. Orienteering			x	x
4. Planning a route			x	x
5. Leading a route			x	x
Cycling tips and tricks				
6. Bike parts	x	x	x	x
7. ABC check	x			
8. M-check		x	x	x
9. Repair a puncture		x	x	x
10. Riding skills	x	x	x	x
Health and happiness				
11. Mindfulness walk	x	x		
12. Heart rate tracker	x	x	x	x
13. Make a change			x	x
14. Active travel challenge		x	x	x
Protecting the planet				
15. Tree detectives	x	x		
16. Litter picking	x	x	x	x
17. Air pollution			x	x
18. Transport footprint			x	x
Active travel champions!				
19. Benefits of active travel	x	x	x	x

Starting your adventure

Activity 1

Adventure kit

When you go on an active adventure, you need to be prepared. The things you need to take will depend on the adventure you're going on.

In this activity we'll think about which items need to go in your adventure kit.

Suitability



Rainbows



Brownies

Equipment

- Paper and pens
- Whiteboard or flip chart paper to make a big list of items
- Items or pictures of items from an 'adventure kit' to demonstrate (see below)

Instructions

- As a group, think about what you need to have in your adventure kit. Here are some questions to get you thinking:
 - What clothes and shoes do you need? Think about the time of day, season and weather – will you need spares in case you get cold or wet?
 - How do you know where you're going? Will you need a map?
 - What are you going to eat and drink?
 - What can you carry in case there's an emergency?
 - What else might be useful? Will you need a bag to carry everything in?
- Think about other types of adventures you might want to do – for example, cycling, canoeing, wildlife spotting or picnicking. Will you need anything else? Such as a helmet for cycling or binoculars for wildlife spotting.
- Think about an adventure you want to go on and make a poster or do a drawing of the things you are going to pack in your adventure kit.

Section 1 – Starting your adventure

Activity 2

Scavenger hunt

Go for a walk round the local area and see how many things you can tick off from the active travel scavenger hunt!

Suitability



Rainbows



Brownies

Equipment

- An active travel scavenger hunt sheet for each girl or group (see worksheet 1 at the back of the pack)
- Pens or pencils to check things off with

Instructions

Go for a walk round your local area with your unit. Look out for things on your active travel scavenger hunt and tick them off as you find them. Discuss why things like crossings, tactile paving and traffic calming measures are important.



Section 1 – Starting your adventure

Activity 3

Orienteering

Orienteering is an activity which challenges you to find checkpoints scattered around an area using a special map. It's a great way to improve your map skills while exploring a new area actively.

Suitability



Equipment

- A map for each group (and list of 'clues' if you are using them)
- A compass for each group – these may help Rangers with more complex orienteering challenges (optional)
- A phone or way to contact a leader for each group
- A camera or notebook and pencil to complete tasks and answer questions

Prep for leaders

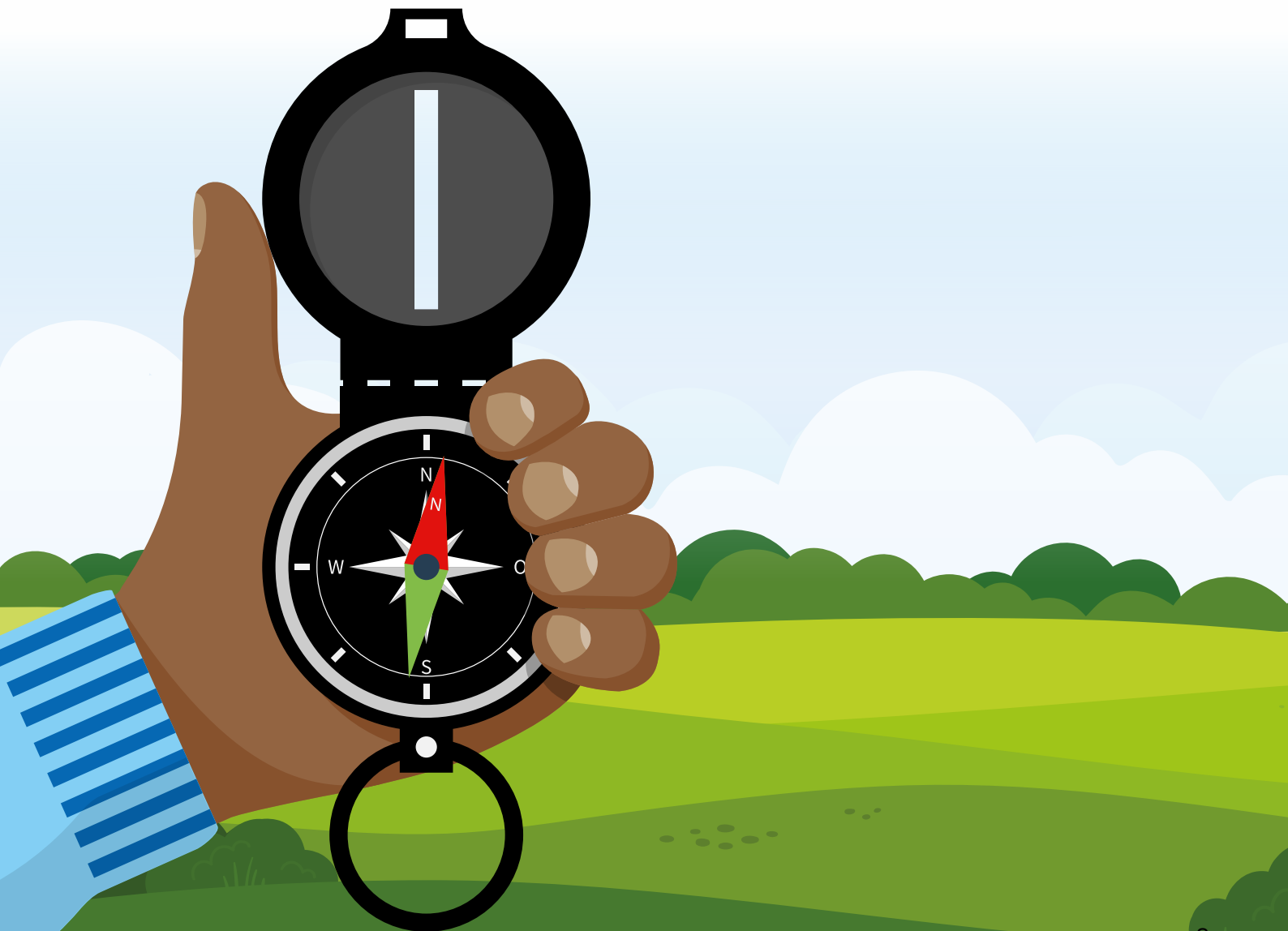
- If you have a local orienteering course, you could use this. Or, if you have a local orienteering group, there may be someone willing to come and speak to your group about orienteering and show you how to get involved. Your county walking adviser or DofE adviser may also be able to help, or point you in the direction of someone who can.
- If you want to create your own orienteering map, you could use oomap.co.uk. This website lets you create orienteering maps of your local area.
 - To create a map, first find and click on your local meeting place. This will centre the map.
 - You can then add controls (checkpoints). Each control should be numbered as groups have to visit them in the right order. If you have several groups, you could use the same points, but number them differently for each group.
 - To make the activity more interesting, each control could be associated with a task, quiz question, or photo challenge.
 - When you're finished, you can download the map as a PDF or a JPG image. If you add tasks in, be sure to also download the 'Clues' which is a checklist of all the challenges.
 - Have a look at 'how to use Open Orienteering Map (OOMap)' (worksheet 2) at the back of the pack for some more hints and tips.

Section 1 – Starting your adventure

Instructions

This activity can either be done as a unit or in smaller groups. Depending on their map reading ability, some groups might require help.

- Give each group an orienteering map. Explain that they must go to each control (checkpoint) in the right order and complete the task associated with it.
- Decide on a time at which groups must come back to the meeting point even if they haven't finished.
- Explain that groups can choose to run if everyone in the group agrees.
- Prizes can be awarded to the group which finishes first or collects all the controls.



Section 1 – Starting your adventure

Activity 4

Planning a route

Working out how to get from A to B is an important skill, especially as you begin to travel independently. This activity is best done working in groups.

Suitability



Equipment

- Maps – you can use local maps or print a map for this adventure. It would be useful to be able to draw on the map, so printing out or photocopying maps might be easiest.
- Pens and pencils

Prep for leaders

- Create a map using print.get-map.org/new or photocopy a local map so that the girls can draw on them.
- If your unit will be going on to lead the route they have planned, get each group to plan 1 section of a loop. So, if there are 3 groups, the loop will be split into 3 sections and group 1 will lead from A to B, group 2 from B to C, and the last group will lead from C to A, finishing their route back at the start.



Section 1 – Starting your adventure

Instructions

- Allocate each group a start and finish point for their route.
- Using a map, plan a walking route from beginning to end. Think about:
 - What makes a nice route? For example, would you prefer to walk along a busy road or through a park?
 - Is there anything interesting you could walk past, or somewhere you would like to stop on the way?
 - What can you do to keep yourself safe along your route? For example, where can you safely cross the road?
 - How much time will it take?
- Using the same start and finish points, plan a cycling route. Think about:
 - What makes a nice route?
 - Where can and can't you go on a bike? For example, you can cycle on roads but not on pavements or footpaths. You can use shared use paths and cycle paths or cycle lanes.
 - What do you need to think about when cycling on a road? How do you navigate junctions?
 - Is there somewhere to lock up your bike at the end?
 - What can you do to keep yourself safe?
 - How much time will it take?
- Compare your 2 routes. Which would you prefer and why? Are there things you would like to change to make your routes better? For example, more crossings, segregated cycle lanes, fewer cars, or wider pavements.



Section 1 – Starting your adventure

Activity 5

Leading a route

Test your route planning skills by leading the rest of your unit on a walk or cycle. This activity needs to be done after the 'Planning a route' activity.

Suitability



Equipment

- Maps with the route marked
- Everything else you might need to go on a walk or cycle

Instructions

- Go on the walk or cycle you planned.
- You will need to think about how to keep the group safe while on your walk or cycle.

When you are back, think about how it went:

- Did you choose a good route?
- Did it take the amount of time you expected it to?
- Would you change anything next time?

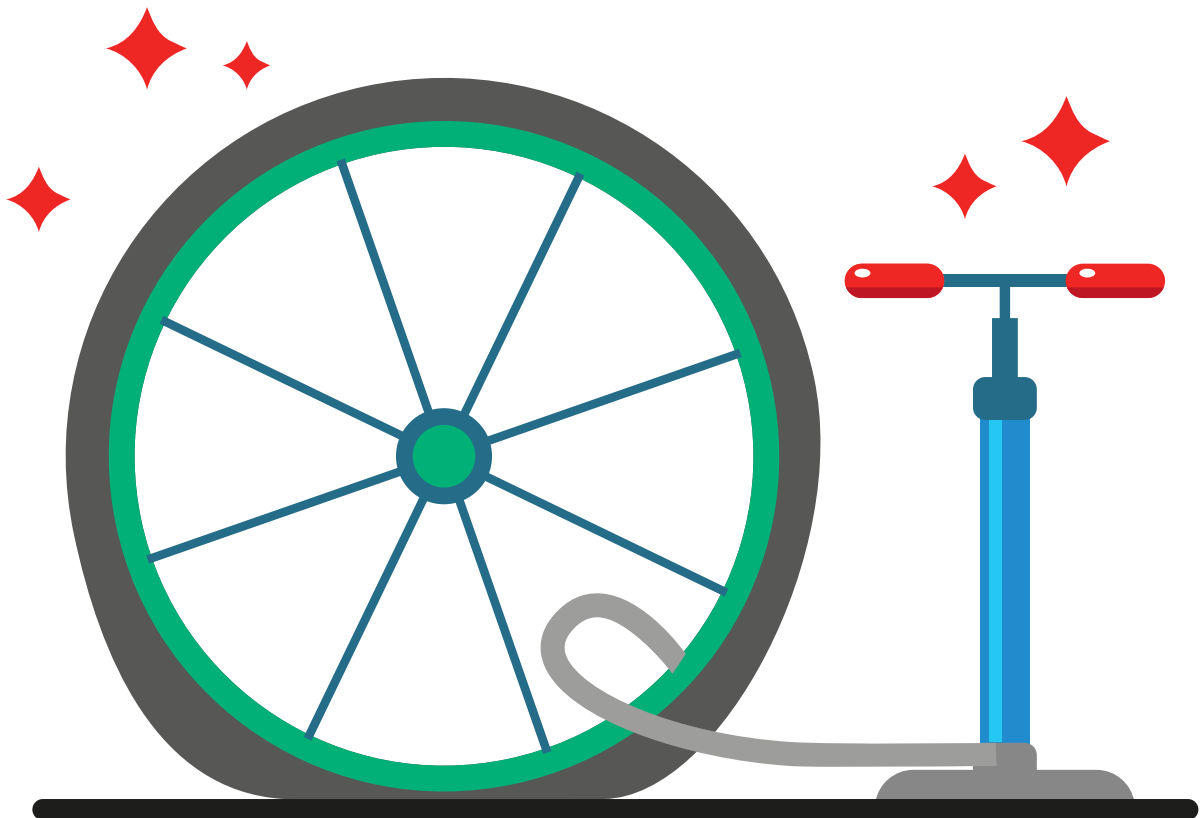


Cycling tips and tricks

Although this section is about bikes, you don't need to have a bike to take part!

- The Bike parts activity can be done by anyone.
- The ABC and M-checks would need a bike per group, or you could do scooter checks.
- Repairing a puncture does need some equipment but doesn't need a bike.
- Riding skills don't need to be done on a bike – try them with a scooter or roller skates instead. Not everyone in the unit would need to bring a bike or scooter either if some are willing to share.

It's also worth checking if you have a local bike library who might be able to help. Sometimes you can hire adapted cycles for free.



Section 2 – Cycling tips and tricks

Activity 6

Bike parts

Bikes are complicated machines, with lots of parts which work together. Knowing what parts are called and what they do can be helpful.

Suitability



Rainbows



Brownies



Guides



Rangers

Equipment

- If you are planning to do this activity as a group:
 - Bike part labels (worksheet 3 at the back of the pack)
 - Scissors to cut up the bike part labels
 - Blu tack or sellotape to stick the bike part labels down
 - A large printout or drawing of a bike (worksheet 4), or a bike that can be used for demonstration
 - A copy of the answers (worksheet 6)
- If you are planning to do this activity individually:
 - A printout of a bike to label for each girl (worksheet 5 at the back of the pack)
 - A pen or pencil per girl to complete the worksheet
 - A copy of the answers (worksheet 6)

Instructions

This activity can be done individually, in pairs or groups, or as a whole unit.

You will need a set of bike part labels and a printout or drawing of a bike (or a real bike and some Blu tack) to label for each group. Both can be found at the back of the pack if you want to print them out (worksheets 3 and 4).

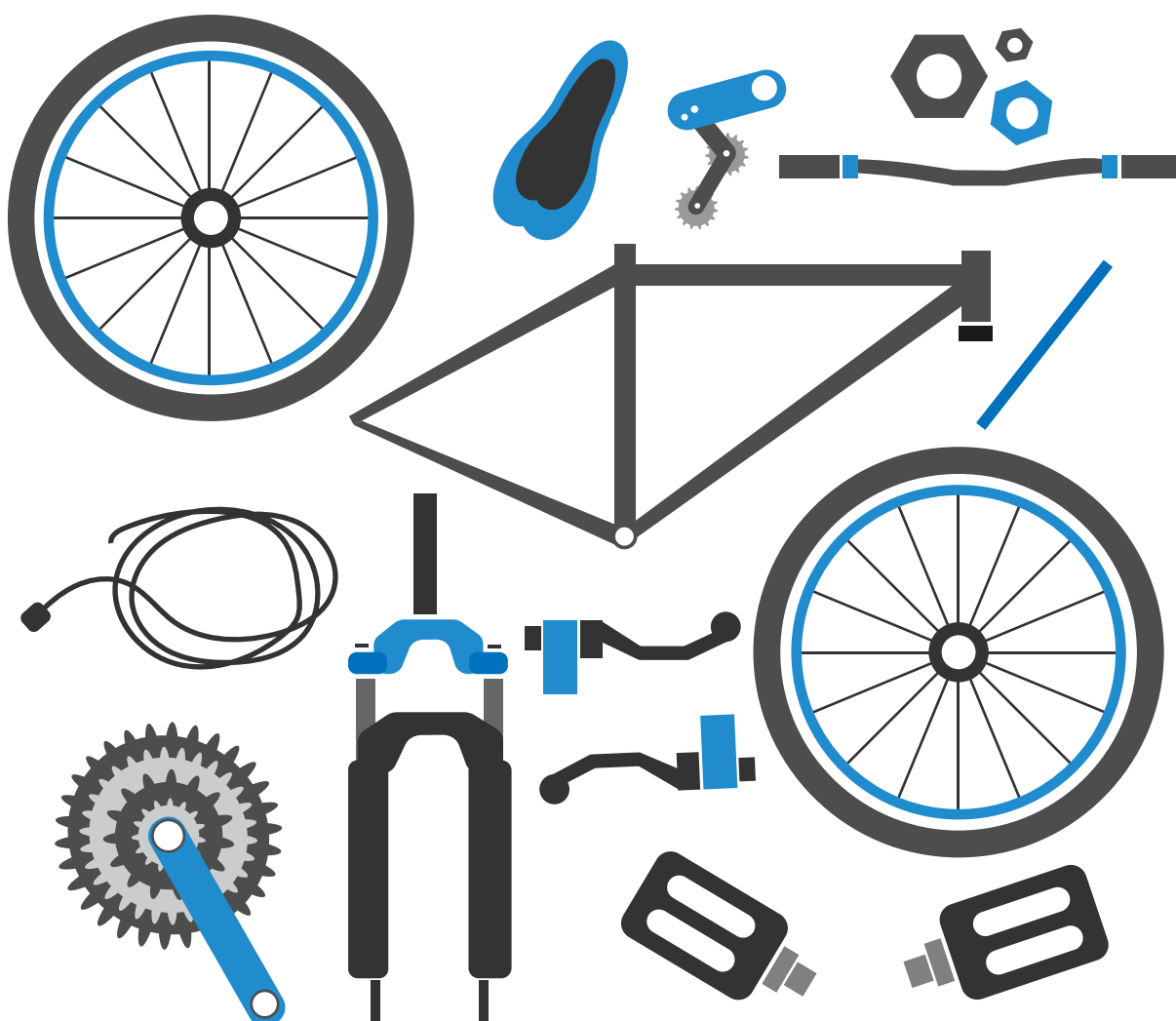
Cut out each of the labels. Discuss in your group where you think each of the parts are on the bike and stick them in the right place.

When everyone is done, compare what you have got. Are there any parts you're not sure about? You can check your answers at the back of the pack (worksheet 6).

Section 2 – Cycling tips and tricks

Extension options

- If you are sticking the labels on to a real bike with Blu tack, when you have labelled the bike once and know where everything is, try it with a cover over your eyes (or your eyes closed) ‘pin the tail on the donkey’ style! The rest of your group will tell you which label you have in your hand, and you have to feel the bike to figure out where to stick it.
- Which parts of the bike do you need to check frequently? You can find out more about this by doing the bike checks section, learning about the ABC or M-Check!
- Discuss what different parts do and why they are important. For example, gears make it easier or harder to pedal which is useful if you live somewhere where it is hilly.



Section 2 – Cycling tips and tricks

Activity 7

ABC check

Being able to check if your bike is safe is an essential part of riding it. In this activity you will learn how to check your bike and do basic bike maintenance.

This activity only covers very basic bike maintenance. If you notice any big problems while doing checks, the bike should be taken to a bike shop.

Suitability



Equipment

- A bike pump – preferably a floor pump with a pressure gauge that’s compatible with different types of valves
- Warm water, washing up liquid, rags, or sponges
- Bike chain lube
- A copy of the ABC check worksheet to refer to (worksheet 7)

Prep for leaders

- For this activity bike(s) are needed, though they can be of any size or type, and don’t need to be in a rideable condition. Encourage the girls to bring their own bikes if possible.
- If no one in your unit has a bike, you could try scooter checks instead. Search for [‘learn how to ride a scooter’](#) on the Sustrans website.

Instructions

Follow the ABC check section at the end of the pack (worksheet 7) to check your bike. If you need to pump up your tyres or clean and lubricate your chain, see the ‘Looking after your bike’ section at the end of the pack (worksheet 8).

Section 2 – Cycling tips and tricks

Activity 8

M-check

Being able to check if your bike is safe is an essential part of riding it. In this activity you will learn how to check your bike and do basic bike maintenance.

This activity only covers very basic bike maintenance. If you notice any big problems while doing checks, the bike should be taken to a bike shop.

Suitability



Brownies



Guides



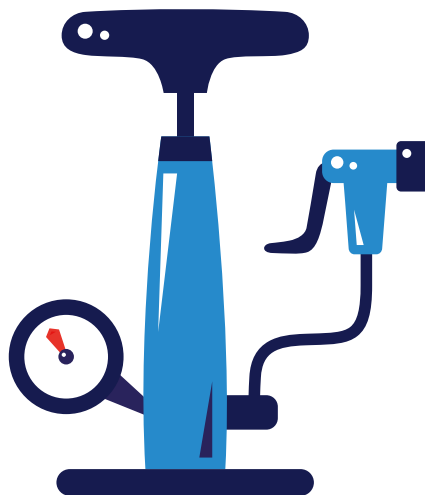
Rangers

Equipment

- A bike pump – preferably a floor pump with a pressure gauge that's compatible with different types of valves
- Allen keys (also called hex keys) or multitools
- Warm water, washing up liquid, rags, or sponges
- Bike chain lube
- Optional – a laptop or tablet with an internet connection to watch the M-check video on. You can always watch this before the meeting, somewhere you can get online.
- Optional – printouts of worksheets 9 and 10

Prep for leaders

- For this activity bike(s) are needed, though they can be of any size or type and can be shared in a group. They don't need to be in a rideable condition. Encourage the girls to bring their own bikes if possible.
- If no one in your unit has a bike, you could try scooter checks instead. Search for '[learn how to ride a scooter](#)' on the Sustrans website.



Section 2 – Cycling tips and tricks

Instructions

An M-check is a type of bike safety check. It's called an M-check because you move in the shape of an M along your bike, checking every part as you go – from the front wheel, up to the handlebars, down to the pedals and chain, up to the saddle and then back down to the back wheel.

Look for [M-check](#) on the Sustrans website for a video showing you how to M-check your bike. There is a quick M-check diagram (worksheet 9) at the back of the pack to remind you which parts to check before you go cycling. There is also a full 'M-check checklist' (worksheet 10) to make sure you've looked at each part of the bike, and you can follow this even if you haven't watched the video.

If you need to pump up your tyres or clean and lubricate your chain, then use the 'Looking after your bike' instructions (worksheet 8), also at the back of the pack.



Section 2 – Cycling tips and tricks

Activity 9

Repair a puncture

Getting a puncture is one of the most common problems you can have while cycling. However, with a few items and a little knowledge you can easily fix it yourself!

Suitability



Brownies



Guides



Rangers

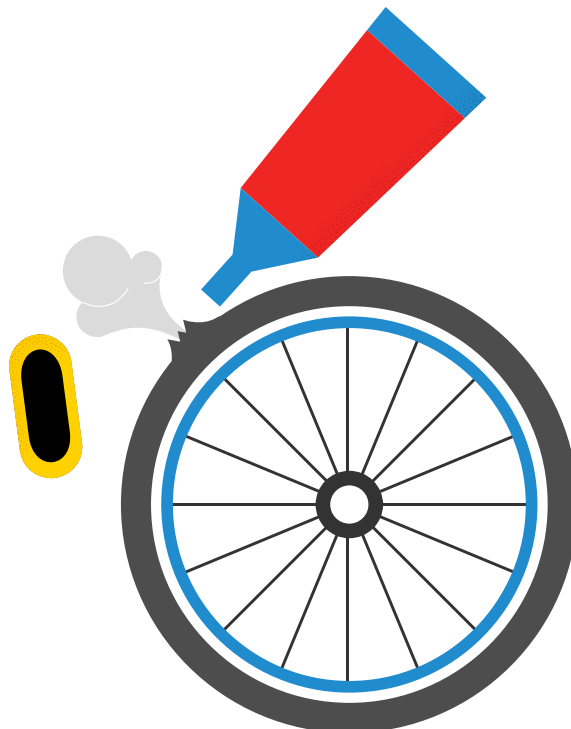
Equipment

- Inner tubes
- Puncture repair kits (including tyre levers, patches, adhesive, sandpaper, chalk/felt tips).
- A bike pump – preferably a floor pump with a pressure gauge that's compatible with different types of valves
- Optional – a laptop or tablet with an internet connection to watch a video on repairing a puncture. You can always watch this before the meeting, somewhere you can get online.



Top tip

- You might be able to get punctured inner tubes from your local bike shop for free – great for practicing on! Or you could try freecycling pages online or on social media.



Section 2 – Cycling tips and tricks

Instructions

The instructions below cover how to fix your puncture, but you might also want to watch a video to see how it's done. Look for [‘How to repair a puncture’](#) by Sustrans, for example.

Give each group a punctured inner tube and a puncture repair kit, and ask them to complete the steps below:

1. Inflate the inner tube and hold it up to your cheek. Look, listen and feel with your hands and cheek for air coming out of the tube. If you can't find the puncture, pump the inner tube up again, submerge it in water and watch for bubbles.
2. Once you have found the puncture, keep a finger on it until you can mark it with some chalk or a felt tip pen.
3. Sandpaper the area around the puncture to make it a little rough to help the patch stick.
4. Add a little bit of glue to the area and spread it around to make a thin layer. Wait a few minutes to let it dry slightly. The glue will change from clear to cloudy.
5. Peel the backing off the patch and carefully stick it over the puncture. Press it down hard with your nail or the back of a spanner.
6. To check the puncture is fully sealed, pump up the tube and then submerge the part you've repaired in a bowl of water. Be careful not to pump it up too much as if it's overinflated, the pressure can cause the patch to ping off! If there are any bubbles, then your puncture hasn't been sealed so you will need to try repositioning the patch and checking again.
7. Pump up your inner tube.

Extension options

- Try repeating the exercise without instructions.
- Try repairing a puncture with your eyes covered (or closed).
- Write or draw instructions on how to repair a puncture for someone who hasn't done it before. Can they do it using your instructions?

Section 2 – Cycling tips and tricks

Activity 10

Riding skills

Developing good riding skills helps you become a confident rider. These games will help you practice the most useful skills – stopping safely, good control, and balance.

If there are girls in your group who can't ride a bike, they might prefer to try using a scooter or roller skates. If you don't have access to enough bikes, scooters or roller skates for everyone in your group to use or share, here are some other options:

- Check if you have a local bike library.
- Bike libraries may also have an adapted bike you could borrow or be able to point you in the right direction of where to find one.
- Many local authorities have adapted bikes available to borrow.
- Your local school may have a fleet of bikes it might be possible to borrow.

This could also be an opportunity for Guides or Rangers to help any Rainbows or Brownies who don't know how to ride a bike, or are lacking confidence, to learn and practice in a supportive environment. There are some good tips on the [Ready Set Ride](#) page of the British Cycling website on how to teach others to ride.

Suitability



Equipment

- Bikes, scooters or roller skates – encourage the girls to bring in their bikes, scooters or roller skates. Bikes or scooters could also be shared if the girls (and their parents!) are willing.
- Cones or chalk
- An outdoor area
- Bean bags

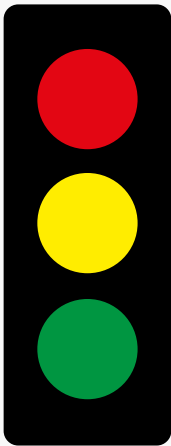
Instructions

Spend a meeting practicing your skills using the activities below. Which ones are you best at? Is there anything you struggle with?

If your group enjoy these and you want to do more, or find something more challenging, you can look online for more suggestions. For example, search for the Cycling Scotland ['Cycling Games'](#) book.

Red light, green light

To practice starting and stopping.



Start cycling, scooting or skating around. When your leader shouts 'red light', stop quickly but safely using your brakes. Imagine you have a plate of grapes on your handlebars and a jug of water on your head – try not to spill any when you stop! When they shout 'green light' start moving again.

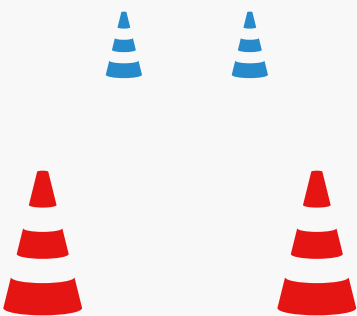
Extension: when your leader shouts 'amber light' cycle, skate or scoot taking as few pedal strokes or push offs as you can. On a bike, this is called freewheeling – where you are moving but not pedalling – and it's a great way to practise balance and control.



Track stand

To help you improve your balance.

Whilst standing up on the pedals of your bike or with both feet on your scooter, see how long you can balance without moving forward. If roller skating, try lifting one foot a little off the floor – do you have a stronger side?

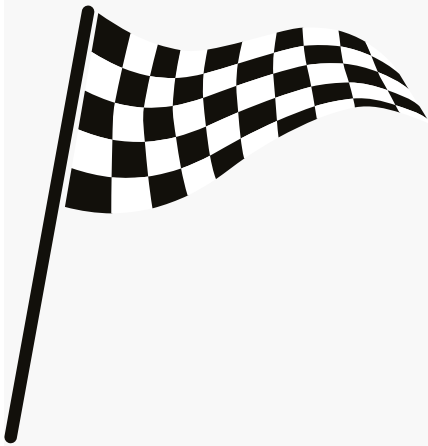


Stop in the box

To practice stopping where you want to.

Mark a box on the ground using cones or chalk. Cycle, scoot or skate up to the box and stop inside it. Make sure your braking is controlled. If you're cycling make sure that you're not using your feet.

To make this harder, you could make the box smaller or mark a spot where the front wheel(s) should stop.



Slow race

To practice your control.

Mark out a start and a finish line. Cycle, scoot or skate from the start line as slowly as you can.

The last one to cross the finish line is the winner!

Rules:

- You must cycle, scoot or skate forwards (not in circles or in squiggly lines)
- If you are cycling and you put your foot down, you're out
- If you are scooting, you need to put your foot down to push yourself forwards as few times as possible
- If you are skating and you put your hands down, you're out
- No touching or bumping anyone else



Bean bag balance

To improve your balance and encourage you to look forward when riding or skating.

Balance a bean bag on top of your helmet and then cycle, scoot or skate around. Once you have had some practice, create an obstacle course to ride or skate around while balancing your bean bag. Can you make it all the way around without dropping your bean bag?



High five

To practice lifting a hand off the handlebars, or improving your balance if you are skating.

Cycle, skate or scoot around, making sure not to go too fast. As you pass your leader, try waving to them. Next, as you pass your leader, give them a high five. Once you have mastered that, try high fiving with your other hand. If you are feeling really adventurous, you could try high fiving someone riding or skating in the other direction!



On the dot

To practise moving in a busy area and being aware of your surroundings.

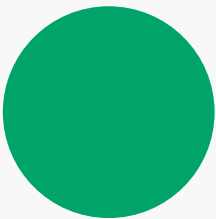
This game is basically musical chairs on wheels and you can play it with music if you prefer! You will need cones, bean bags or some other marker for each person playing.



Lay out your markers in the area you are playing in. Once everyone is ready, you can move in any direction you like, you just need to be aware of everyone else so you don't crash into each other. When a leader shouts 'on the dot!', everyone must put their front wheel next to a marker. There can be only 1 person at each marker, so whoever got there first can stay, and the other person has to find another marker. When you have practised this a couple of times, a leader will start taking a marker away each round, and the person who doesn't have a marker will be out of the game.



When there are only a few people left, mark out the corners of a square or rectangle that the riders have to move around the outside of, and put 1 marker in the middle as the target. No one is allowed inside the square or rectangle until the leader shouts 'on the dot!' and then the first person to get their front wheel on the marker is the winner.



Health and happiness

Activity 11

Mindfulness Walk

Going for a walk outside is good for us in lots of ways. It helps us keep fit, concentrate better, feel happy, and get fresh air.

Suitability



Rainbows



Brownies

Equipment

- A mindfulness walk worksheet (see worksheet 11 at the back of the pack) for each person, or paper to write and draw on
- Pens or pencils to write, draw and colour in with

Instructions

As a group, go for a walk in your local greenspace, for example, a park, nature trail or woodland.

1. Listening walk

Walk in silence for 5 minutes, focusing on listening to the sounds around you. See if you can hear all the sounds on the worksheet.

After 5 minutes, talk about what you managed to hear. Did you hear any sounds that weren't on the sheet? Would you have heard all the sounds if you weren't walking quietly and concentrating on listening? If not, why not?

Focusing on the sounds around us when we walk can help us feel more mindful – how did you feel on your listening walk?

Listen again for 5 minutes and see if you can hear anything new.

2. Mindful spot

In your greenspace, find your own special place to sit quietly and be alone in nature. Sit for a minute in your magic mindful spot and use your different senses – what can you hear, see, smell, touch, and taste?

After the minute is over, talk about what you experienced.

Go back to your mindful spot and sit for another minute, focusing on your surroundings. After this minute, draw a picture on the worksheet of the things you observed.

Section 3 – Health and happiness

Activity 12

Heart rate tracker

Over an average lifetime, the human heart beats more than 2.5 billion times. To keep our hearts healthy, it's important to do regular exercise and to eat healthily.

But what happens to the heart when we exercise?

When we exercise, our muscles need more oxygen. Our blood carries oxygen from our lungs around our body. This means when we exercise our heart beats faster to supply more oxygen to our muscles. We also breathe quicker to take in more oxygen.

Suitability



Rainbows



Brownies



Guides



Rangers

Equipment

- Some paper and pens or pencils

Instructions

- Start by making sure everyone can find their pulse, either on your wrist or your neck. Use your finger not your thumbs, as your thumb has its own pulse. To find your pulse on your wrist:
 - Hold your hand out as if you were going to shake someone's hand
 - Take the first 2 fingers of your other hand, follow the curve of your thumb down to your wrist and stop
 - Press lightly – can you feel your pulse going bump, bump, bump under your fingers?
 - If not, lift and move your fingers just a tiny bit towards your inner wrist and press again
 - If you still can't find your pulse, ask an adult to help you
- When seated and rested, ask everyone to take their pulse counting from 0. Time them for 10 seconds and get them to write down the number of beats. You can ask older girls to multiply this number by 6 to get beats per minute.
- Next walk briskly around the room for 2–3 minutes, swinging your arms. Take your pulse again for 10 seconds and record as before.
- Then run around the room or do star jumps for 2–3 minutes. Take your pulse again for 10 seconds and record as before.
- Finally, walk around the room slowly for 2–3 minutes. Take your pulse again for 10 seconds and record as before.
- What do you notice about the 4 measurements? Are they all the same? Are some higher than others? Why might that be?

Section 3 – Health and happiness

Discussion

It is important that children and young people stay active to keep them strong and healthy. Only 70% of young people in Scotland do enough exercise. Can you think of some fun ways to increase the amount of activity you do? Is there something you could change in your daily routine to get you moving more so it becomes a daily habit?

Maybe there's something you already do as part of your daily life that gets you moving that you could share with the group, like TikTok dance challenges or standing on one leg while you clean your teeth to improve your core strength and balance!

The main things to keep in mind when you're thinking of making changes are, is it fun? Does it make me feel good physically? Does it make me feel happy and help me feel less stressed and worried?



Section 3 – Health and happiness

Activity 13

Make a change

Change a journey that you would normally make by car or public transport to active travel.

Suitability



Equipment

None needed

Instructions

Talk to the group about how to change journeys with active travel. Give examples of journeys that could be changed by walking, scooting or cycling – for example, to and from school, to a friend's house, visiting relatives, to the shops or to the leisure centre.

Challenge everyone to change 1 journey to active travel by the next meeting. Remind everyone to make sure they plan a safe route and have their parent's permission.

At the next meeting, ask everyone to think about how they normally feel after making the journey they changed. And then think about how they felt after changing the journey to active travel. Did they feel more awake or more tired? Was it easy or hard? Which did they prefer? Will they keep it up?

Section 3 – Health and happiness

Activity 14

Active travel challenge

Travelling actively is important for everyone as it helps us stay strong and healthy, is a more environmentally friendly way to travel, and it's a great way to destress and boost our mood.

NHS Scotland recommends that children and young people aged 5 – 18 should do a minimum of 60 minutes of aerobic activity every day. This can be anything from cycling and walking to swimming or skateboarding. The best way to achieve these 60 minutes is to build it into your daily routine, such as by walking, cycling, or wheeling to get to places, active playground games, or activities and sports at the weekends.

Suitability



Brownies



Guides



Rangers

Equipment

- A chart to tally activity anonymously
- Pens or pencils to add to the chart

Prep for leaders

Have a big paper tally chart for your unit to update as they come into the meeting.

Try and make sure the girls aren't having to do this in front of everyone else, so there's some anonymity to how many miles each person has done, and the group effort is celebrated rather than any individuals. At the end of the session, you can bring the overall tally chart out and celebrate the group's achievements!

Instructions

This activity is a challenge for the whole group to work towards together. It can be run over 1 week, between meetings, or extended over a longer period.

The aim of this activity is to see how far the group can collectively travel using only active journeys (not travelling by car, bus or train).

Over the course of the challenge, everyone will record the number of active journeys they've made each day.

Section 3 – Health and happiness

Instructions (continued)

This can be anything from walking to school, to going for a walk, swim or skate with friends for fun, walking to the shops or cinema, or even going on a family bike ride!

Each active journey counts as at least 1 mile. If your journey is over 1 mile, you can record the actual number of miles travelled.

You can track your individual miles if you want to, but this is not a competition to see who can do the most, it is a group challenge to see what you can achieve if you work together and how much further you can go as a group.

For some people it will be harder to ditch the car because they maybe live further away from school, the town or their friends and that's ok, you can still count an active journey if you park and stride or park and ride by driving for some of the journey and then, if it's safe to do so, stopping a little further away than normal to walk, wheel, or cycle the rest of the way.

How far can your group go?

5.5 miles

The distance from sea level to the top of Everest

22.5 miles

The length of Loch Ness

50 miles

The distance from Edinburgh to Glasgow

96 miles

The distance of the West Highland Way

200 miles

The distance from Paris to Brussels

400 miles

The distance from Edinburgh to London

603 miles

(as the crow flies)
The distance from Land's End to John o'Groats

9490 miles

(as the crow flies)
The distance from Scotland to Australia

24,901.461 miles

The distance around the world

If there's somewhere that's special to your unit, why not use that as a group target? Maybe the distance to where you're going on pack holiday, where you are going for an end of term day trip, or the distance to a jamboree you're planning to attend!

Protecting the planet

Activity 15

Tree detectives

Trees are crucial for humans and for the natural environment. They are the biggest plants on the planet and do lots of important things such as storing carbon, creating oxygen, cleaning our air, providing a home for wildlife, and stabilising the soil.

In this activity we'll make some art using trees and see how many different trees we can identify.

Suitability



Brownies

Equipment

- Access to trees or leaves
- Paper
- Crayons, charcoal, pencils
- Tree ID sheets (the Woodland Trust has lots of great options – search '[Woodland Trust tree ID for kids](#)')

Prep for leaders

In good weather, this activity can be done outside. In bad weather, leaves can be collected beforehand to make rubbings.

Instructions

This activity has two parts, making bark and leaf rubbings, and identifying trees.

Section 4 – Protecting the planet



Bark and leaf rubbings

To make bark rubbings you will need a dry day. First, find a tree with interesting, textured bark. Press your piece of paper against the tree and hold it in place. Using your crayon, charcoal or pencil, rub against the paper. When the pattern has come through you can move the paper, and you will have an imprint of the bark pattern.

To make a leaf rubbing, choose a leaf. Place your leaf on a hard surface (a notebook or a table), and then place your piece of paper over the top. You might want to put a paperweight or some pebbles on the corners to stop your paper from moving. Then take your crayon, charcoal or pencil and carefully rub it over the paper until the leaf shape comes through.



Tree ID

Use a guide to help you ID the trees you see. The Woodland Trust has lots of great options for different times of year. If you have lots of leaves and rubbings, you might be able to ID each leaf using their leaf spotter sheet. However, in the winter it might be difficult to find leaves, so instead you could use their Winter Tree ID sheet. Did you manage to ID them all?

Section 4 – Protecting the planet

Activity 16

Litter picking

More than 2 million pieces of litter are dropped in the UK every day. Litter can be anything from a crisp packet to a discarded piece of furniture. This is a problem because it takes years for litter to degrade or break down, causing harm to wildlife and habitats. Litter makes an area look untidy and can also make people feel less safe.

Suitability



Equipment

- Litter pickers
- Gloves
- Bin bags

Instructions

As a unit, litter pick along a stretch of local cycle path or footpath. If it's close to your meeting place, you might want to set aside 15 minutes to go out each week for a few weeks. Guides and Rangers could go out in their patrols to different areas or spread along the path.

- Move slowly along the path and pick up all the litter you find. Litter can be really small, so look carefully.
- Some of the litter you pick up might be able to be recycled. Have a conversation at the beginning about what can be recycled in your area. Then decide how you are going to separate the different types.
- What are the most common types of litter you find? How do you think we could persuade people to litter less? Are there enough bins?
- Remember to throw away the litter safely.

Section 4 – Protecting the planet

Activity 17

Air pollution

Air pollution is something in the air that can cause harm or damage. There are lots of different types of air pollution and it can come from both natural and human sources. For example, volcanic eruptions and wildfires are natural sources of air pollution, while human sources include fumes from factories and vehicles.

Particulate matter (PM) is a type of air pollution that is a mixture of solid and liquid particles suspended in the air. They are generally grouped into two categories depending on their size. PM10 are the bigger particles, and can irritate your eyes, nose, and throat. PM2.5 are much smaller and can get deeper into your lungs.

Motor vehicles are a large contributor to particulate matter pollution, through soot from petrol and diesel engines, and wear and tear from tires. If we switch from cars to walking, cycling, or wheeling for everyday journeys such as going to school, we can help reduce particulate matter and improve air quality.

Suitability



Equipment

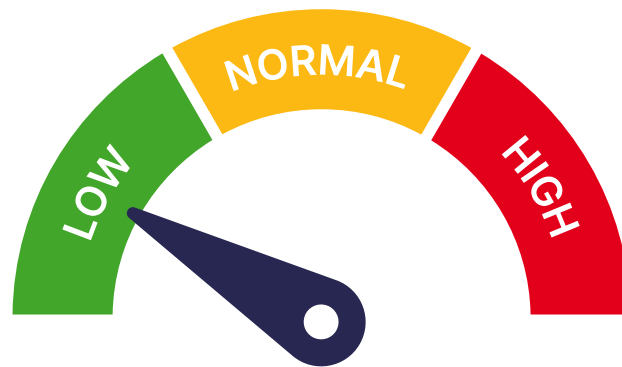
- Sticky tape or slightly damp cotton balls
- Paper and pens
- Glue or sticky tack
- Tape measure or metre stick (optional)

Instructions

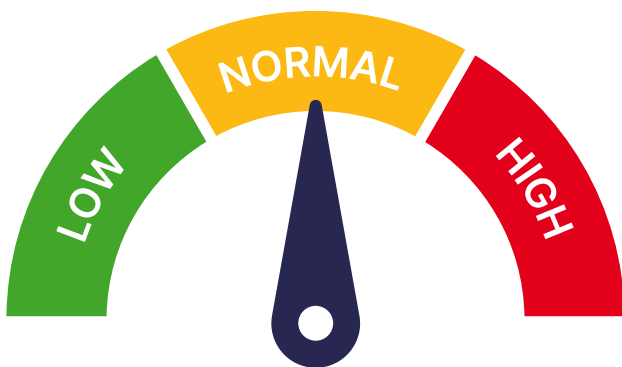
1. Go out into the local area.
2. Choose dry surfaces to sample in different locations. For example, the door to your meeting place, a post box on a busy road, a lamppost on a footpath.
3. Select different heights to take your samples such as 50cm, 100cm and 150cm, or hip height, head height, and as high as you can reach.
4. Take your samples:
 - a. If using sticky tape, cut into 10cm lengths, place the sticky side on the surface, give it a quick rub and then peel it off.
 - b. If using cotton balls, dampen the ball slightly with water and give the surface a firm swipe.
5. Stick each piece of tape or cotton ball onto a sheet of paper and label them with the location and height that you sampled. Mark the pollution level from 1 to 4: 1 for the dirtiest sample and four for the cleanest sample.

Things to think about once you have collected your samples.

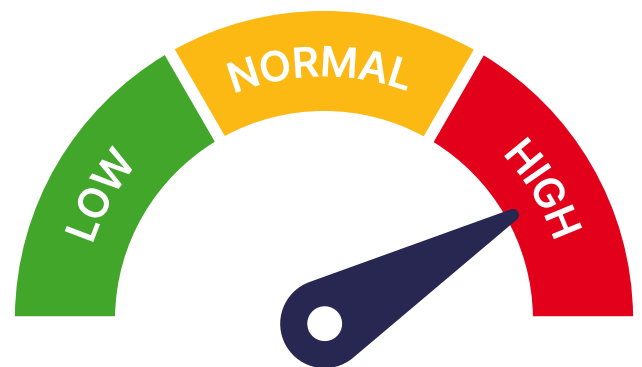
- Could you tell if lower or higher heights are more polluted?
Who is more impacted by pollution at lower heights?
- Was there more pollution closer to roads or further away from roads?
- What long-term effects might high concentrations have on your health or the environment?
- How can we reduce the amount of particulate matter in the air?



LOW
AIR POLLUTION



NORMAL
AIR POLLUTION



HIGH
AIR POLLUTION

Section 4 – Protecting the planet

Activity 18

Transport footprint

Transport is the largest emitter of greenhouse gas emissions in the UK, producing 27% of the UK's total emissions in 2019. These emissions are just from domestic transport – transport within the UK. 61% of these emissions come from cars and taxis which are some of the easiest journeys to change, as 50% of car journeys are under 2 miles.

Suitability



Equipment

- Modes of transport worksheet (worksheet 12 at the back of the pack)
- Greenhouse gas emissions worksheet (worksheet 13 – make sure to keep hold of this until after the discussion around modes of transport!)
- Pens and paper

Instructions

Which transport types emit the most greenhouse gas?

- In groups, cut out the different types of transport and place them in order of greenhouse gas emissions.
- When everyone is finished, compare your guesses to the table of greenhouse gas emissions. Did you get the right order? Did anything surprise you?

Your transport emissions

- Using the instructions and table on worksheet 13 to work out how many grams of carbon dioxide equivalent (gCO₂e – a metric that combines all the different types of greenhouse gases) you might emit in a normal week.
- Reflect on your emissions. Could you use a different mode of transport for some of your journeys? Would this reduce your personal transport emissions?
- Have a discussion in your group about what this all means for the environment in Scotland. What are some possible solutions to the issue?
- Decide on 1 way you can reduce your emissions in the next week.
- You might also want to share what you've learned with your family and encourage them to reduce their emissions by making some easy swaps.

Active travel champions!

Activity 19

Benefits of active travel

Well done for completing activities from each of the themes! This final activity brings together everything you've done.

Suitability



Rainbows



Brownies



Guides



Rangers

Equipment

○ Art supplies

Instructions

Create a poster, presentation, speech, picture, or anything else you like to tell everyone why active travel is great.

For example, you could:

- Make a presentation about why exercise is good for us and why travelling actively can help us keep active and healthy.
- Design a poster about the environmental benefits of active travel, with tips on how to switch from travelling in a car or bus to walking or cycling.
- Create a guide helping people plan their own routes.
- Draw a picture of your unit going for a walk or cycle.

We would love to see what you come up with! Share your creations with us on social media using the information on the next page.

Thank you

Congratulations on completing Active Adventures! We hope you enjoyed finding out more about active travel and learning new skills to help you travel more actively.

You can buy your badge from the [Girlguiding Scotland online shop](#), in person from our Edinburgh shop or through your local depot.

You can find out more about the work Sustrans does by checking out their [website](#), and if you have any questions, you can contact them on schoolsscotland@sustrans.org.uk. If you have a spare minute, Sustrans would love you to complete their [activity leader survey](#), which helps them to demonstrate impact and improve their resources.

We'd love you to share your Active Adventures with us on social media - be sure to tag us and use #ActiveAdventures. You can find Girlguiding Scotland on [Facebook](#), [Instagram](#) or [Twitter \(X\)](#) @GirlguidingScot. And you can find Sustrans using the details below.

Twitter (X): [@SustransScot](#)

Facebook: [@SustransScotland](#)

Instagram: [@Sustrans](#)



Worksheet 1

Scavenger hunt

Go for a walk round your local area with your unit and see how many things you can tick off from our active travel scavenger hunt!

When you find them, talk about why things like crossings, tactile paving and traffic calming measures are important.

- Someone cycling
- Someone walking
- Someone wheeling (scooter, skateboard, wheelchair)
- Different types of crossing
 - Zebra crossing
 - Pelican or puffin crossing
 - Toucan crossing
 - Pedestrian island
- Tactile paving
- Cycle lane
- Bike box
- Cycle parking
- Traffic calming measures
 - Speed bumps/tables
 - Chicanes
 - Buildouts
 - Reduced speed limits



Worksheet 2

How to use Open Orienteering Map (OOMap)

Create your own orienteering map using oomap.co.uk.

Map type options

You can use map feature to add post boxes

You can save the map as a PDF or JPG image – remember to print the clues as well to get a checklist

Choose 4000

Click on the map to add a control

Points and descriptions can be edited

Descriptions can be used to give groups a task

Control options

Tip: There can only be one start or finish control. Adding another moves it.

Girlguiding Scotland				
Event Date	Club			
2023-07-08	None			
1:4000	5m contours			
Remember you have to go to the checkpoints in the right order. If you're having any issues, call a leader!				
4 controls	40 points			
1	10	What's the date over the ...	<input type="checkbox"/>	<input type="checkbox"/>
2	10	Take a picture of the gate	<input type="checkbox"/>	<input type="checkbox"/>
3	10	What's the door number?	<input type="checkbox"/>	<input type="checkbox"/>
4	10		<input type="checkbox"/>	<input type="checkbox"/>

Drag control descriptions in this table to re-order.

Control options

Tip: There can only be one start or finish control. Adding another moves it.

Control Start Finish Do Not Cross: X Crossing Point:][

Number: 4 Score: 10 -20 30 40 50

Description: Who used to live here?

Delete OK Cancel

Worksheet 3

Bike part labels

There are 2 sets of labels on this page but print as many sets as you need for the number of groups you have.

.....

Bike part labels

Cut out each of the labels. Discuss in your group where you think each of the parts are on the bike and stick them in the right place.

Saddle	Brake lever	Brake pad	Pedal
Chain	Rear cassette (gears)	Reflector	Valve
Spokes	Handlebars	Tyre	Quick release lever

.....

Bike part labels

Cut out each of the labels. Discuss in your group where you think each of the parts are on the bike and stick them in the right place.

Saddle	Brake lever	Brake pad	Pedal
Chain	Rear cassette (gears)	Reflector	Valve
Spokes	Handlebars	Tyre	Quick release lever

Worksheet 5

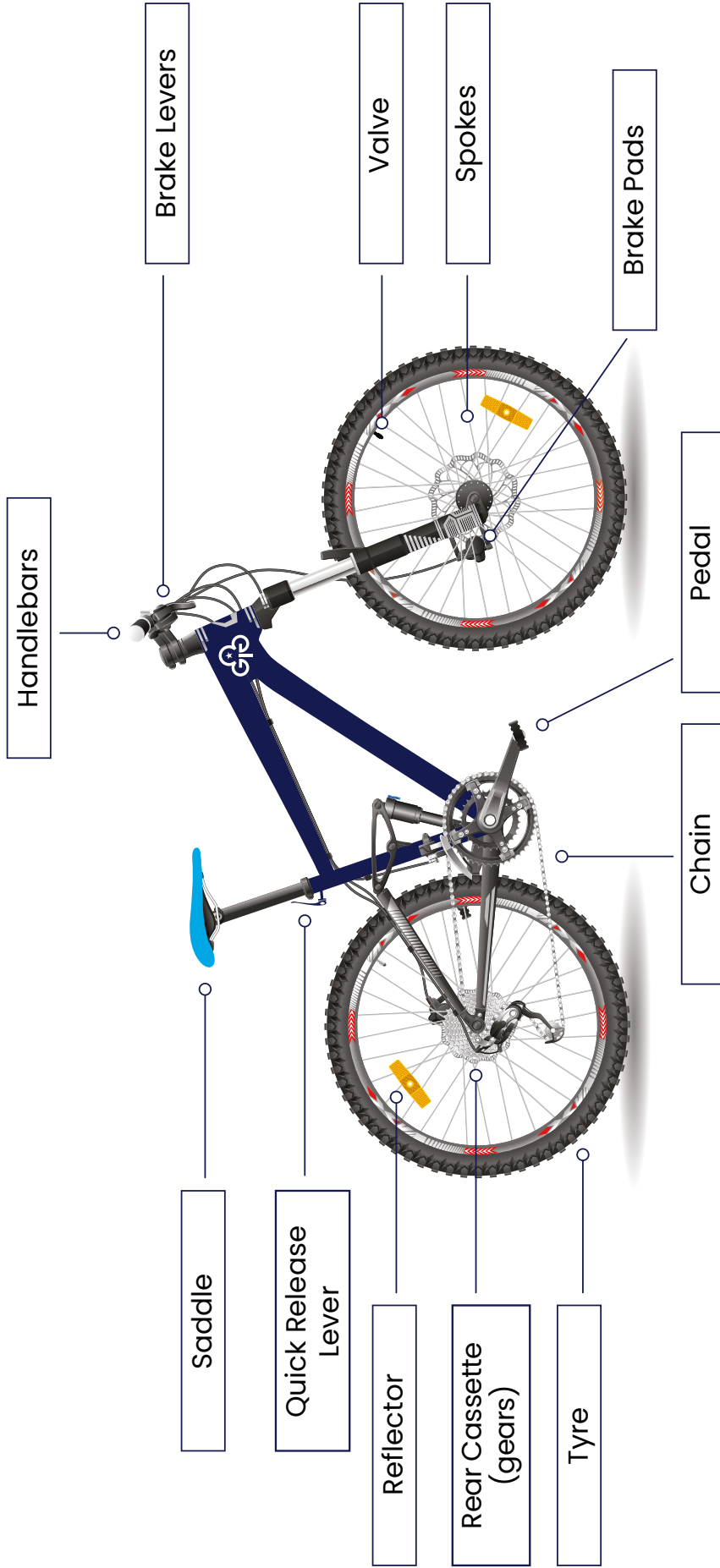
Bike printout to label for individuals

Have a go at labelling the parts on the bike. Your leader will have a list of bike parts they can give you, or you can try labelling the parts first and then see how many you got right.



Worksheet 6

Bike parts answers



Worksheet 7

ABC Check

Follow the guide below to check your bike. If you need to pump up your tyres or clean and lubricate your chain, see the 'Looking after your bike' section.



A is for air

Squeeze both tyres to see if they are pumped up enough. They should feel firm like an apple not squishy like a banana.

If a tyre is too soft, then you can pump it up.



B is for brakes

Working brakes are very important, as they make sure that you can stop your bike safely.

First squeeze both brake levers and push your bike forward. If the front brake is working, your bike won't roll, and the back of the bike might lift up a little.

Then firmly squeeze both brakes levers again to test the back brake, this time trying to roll your bike backwards. Again, if the brakes are working the bike shouldn't move, and the front of the bike might lift.

If you can make your bike roll while holding the brakes, then it's time to take your bike to a bike shop.



C is for chain

Look along your chain. It should look silvery-grey, not rusty brown or grubby black.

Listen to your chain when you turn the pedals backwards. It should be quiet, and not make any clicking sounds.

If your chain isn't silvery-grey, you can clean it and then, once you've dried it, put some oil on it to make it run smoothly. It's also good to oil your chain if it sounds loud.

Worksheet 8

Looking after your bike

How to pump up your tyres

You will need a bike pump.

- First, look around the tyre for the letters 'PSI.' followed by some numbers. These numbers will tell you how much air pressure you need to put in your tyres.
- Then find the valve (where the air goes in) and screw off the cap. Make sure you put it somewhere safe, so you don't lose it. There are a couple of different valve types, so make sure you have the right one attached to your pump.
- Pump up the tyre using a bike pump. Watch the gauge as you pump it up to make sure you get the right air pressure.
- When you're finished, screw the cap back on and give it a final squeeze to feel the difference.

How to clean your chain

You will need a bucket or a bowl with hot water and washing up liquid, and sponges or rags (keep one dry to dry your chain at the end).

- First, fill a bucket or a bowl with warm soapy water using washing up liquid.
- With sponges or rags, gently clean the chain. You can do this by holding the chain and then turning the pedals backwards. Old toothbrushes can be great for getting into the trickier gaps.
- When the chain looks silvery, dry it with a dry rag.

How to lubricate your chain

You will need some bike chain lubricant.

- Put a cloth or paper towel underneath the chain to catch any drips.
- While turning the pedals backwards, slowly drip lube onto the chain. You don't need very much! If you use too much oil, it will pick up more dirt and make it harder to clean the chain.
- If you do get any drips on the tyre or rim of the wheel, make sure to wipe these off so it doesn't interfere with the brakes.
- If your bike has gears, change it through the gears to spread the lube.
- Listen to your chain to make sure it sounds quiet.

Worksheet 9

Quick M-check

This is a quick safety check you can use before each ride. If anything needs to be adjusted, check the 'Looking after your bike' section.



Bike M-Check

A safety check before each ride

1. Front wheel not wobbly, tyre pumped up, spokes OK
2. Handlebars straight and not wobbly, bar-end plugs, front brake works
3. Pedals spin freely
4. Seat at right height and tight
5. Rear wheel not wobbly, tyre pumped up, rear brake works, spokes OK

Worksheet 10

Full M-check checklist



Use the M-check checklist to make sure you've looked at each part of the bike. If anything needs to be adjusted, check the 'Looking after your bike' section.

Bike Part	✓	
Wheels and Tyres		<p>Check the tyres feel firm. If they feel soft, then you need to pump them up.</p> <p>Are the tyre treads in good condition and not worn?</p> <p>Do the wheels turn easily?</p> <p>Is the wheel tightly fitted and the quick-release lever secure in the closed position? Not all wheels will have quick-release levers. If the wheel is not quick release, check that the nuts on both sides of the wheel are secure.</p>
Steering		<p>Does the front tyre line up in the middle of the handlebars when you look down?</p> <p>Can you move the handlebars if you hold the front wheel between your legs? Your handlebars shouldn't be able to move when the wheel is clamped between your legs.</p> <p>You can prevent any movement by tightening the stem bolts and the handlebar clamp with an allen key (also called a hex key).</p>
Brakes		<p>Do your brakes stop your bike? To check the front brake, apply the brakes and push the bike forwards. To check the back brake, apply the brakes and pull the bike backwards.</p> <p>Look at the brake pads, are they worn? When you apply the brakes, do they sit flat against the rim of the wheel?</p> <p>Are the brake levers tight and level?</p>
Pedals and chain		<p>Spin your pedals, do they move smoothly?</p> <p>Take a look at your chain, it should be silvery-grey, not rusty brown or grubby black! If it's not silvery-grey you need to clean your chain and lubricate it afterwards.</p> <p>Turn the pedals backwards and listen to your chain. Does it make a loud clicking sound or is it quite quiet? If it's noisy or gets stuck, it could be stuck between gears, if it's still noisy after pedalling and changing gear, you may need to lubricate your chain.</p>
Saddle and seatpost		<p>Give your saddle a wiggle, does it move? If it does you can tighten it using the quick release or an allen key (also called a hex key).</p>
Frame		<p>Check over the frame for damage, dents and rust. If it looks dirty you can clean it with a sponge, hot water and washing up liquid.</p>

Worksheet 11

Mindfulness walk

Go for a walk and listen carefully to what is going on around you. Can you hear...

- A bird tweeting
- A dog barking
- A bee buzzing
- Cars driving
- Leaves rustling
- A phone ringing
- Laughter
- Wind
- Twigs snapping



Take a mindful minute and then draw what you heard, smelled, saw, touched and tasted.

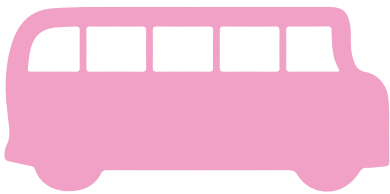
Finally, have a moment of gratitude - what did you enjoy on your walk and what are you thankful for?

Worksheet 12

Modes of transport

Which transport types emit the most greenhouse gas?

- In groups, cut out the different types of transport below and place them in order of greenhouse gas emissions from highest to lowest.
- When everyone is finished, compare your guesses to the table of greenhouse gas emissions (see worksheet 13). Did you get the right order? Did anything surprise you?



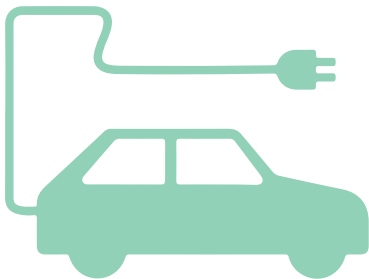
Bus



Car



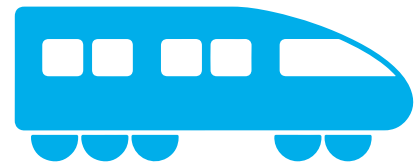
Cycling



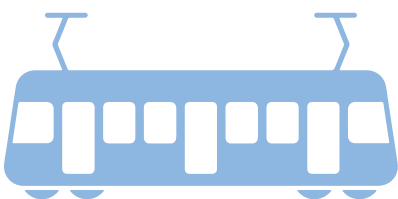
Electric Car



Plane



Train



Tram



Walking



Wheeling

Worksheet 13

Greenhouse gas emissions

Your transport emissions

- Using the table below, work out how many grams of carbon dioxide equivalent (gCO₂e – a metric that combines all the different types of greenhouse gases) you might emit in a normal week:
 - To do this, write down the journeys you usually take and the mode you use, then estimate how far each of these journeys is.
 - Once you have an estimated distance for each journey, you can multiply it by the amount of gCO₂e emitted per km or mile for the mode you used.
 - So for 1 journey by car over 3 miles, it would be 3 (miles) x 307 (gCO₂e per mile by car) = 921 gCO₂e
- Reflect on your emissions. Could you use a different mode of transport for some of your journeys? Would this reduce your personal transport emissions?
- Decide on 1 way you can reduce your emissions in the next week.
- You might also want to share what you've learned with your family and encourage them to reduce their emissions by making some easy swaps.

GHG emissions (gCO₂e)

Mode	Per Km	Per Mile
Plane	255	408
Car	192	307
Electric car	77	123
Bus	67	106
Train	41	66
Tram	35	56
Walking	0	0
Wheeling	0	0
Cycling	0	0



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