



MSF Carbon Explorer Badge (Girl Guides)



MSF is a nationwide highways contractor specialising in street lighting, traffic signs, technology, civil engineering, EV charging & independent connections (ICP).



STREETS AHEAD

Table of Contents

Overview

01

Girl Guide Groups

02

Rainbows

03

Rainbows Chart

04

Brownies

05

Guides

06

Rangers

07

Overview:



The Carbon Explorer Badge cultivates environmental awareness in young people through practical carbon offset activities. Participants create a computational model to quantify their weekly carbon footprint from travel, then develop and implement a four-week offset plan through activities like tree planting or active transportation. They document their progress digitally, reflect on sustainability implications, and present their complete model to a leader, discussing challenges encountered and potential improvements. This badge effectively combines digital skills, environmental education, and practical sustainability actions while encouraging analytical thinking about personal carbon impacts and creative approaches to meaningful offset solutions.

GIRL GUIDE GROUPS

- Rainbows (age 4-7 years) - “Helping the Earth”
- Brownies (age 7-10 years) - “May Carbon Footprint Adventure”
- Guides (age 10-14 years) - “Build a Better World Model”
- Rangers (age 14-18 years) - “Offset Challenge”



RAINBOWS

(ages 4-7 years)

Rainbows will explore how they travel each week by creating fun drawings or charts with help from their leaders. They'll pick simple, eco-friendly actions—like walking or turning off lights—and track their progress with stickers or stamps. Through stories and group chats, they'll learn how small changes can help the planet, and share their good deeds with the rest of the group.

Design	Create drawings of how you travel places in 1 week. (e.g. car, bike, walk.)
Decide	Choose 1 small action to help the earth each week. (e.g. walking instead of car.)
Record	Use stamps or smiley faces on the weekly chart to show when you did your earth friendly action.
Sustainability	Talk as a group about what else can help the earth. (e.g. turning off lights.)
Present	Draw a picture or show your chart and tell the story of how you have helped the earth.

BROWNIES

(ages 7-10 years)

Brownies will start their adventure by creating a simple travel chart to see how they move around during the week. They'll choose one Earth-friendly action to try each week, like recycling or walking more. Over four weeks, they'll track their efforts and talk together about how everyone can help the planet. They'll finish by making a fun poster or doing a short presentation for their unit.

Design

Create a paper chart showing how you travel per week.

Decide

Pick one way to be greener (e.g. walking, recycling, plating.)

Record

Use a fun logbook tracker over weeks

Sustainability

Talk with the group about why helping the planet is important.

Present

Create a poster or do a short talk to the group about your log book.

GUIDES

(age 10-14 years)

Guides will design a simple carbon model by looking at how they travel and what impact it has on the environment. They'll then decide on ways to offset their footprint, such as planting flowers, using active travel, or saving energy. By recording their efforts over weeks and discussing sustainability as a Pack, they'll learn how their actions can make a big difference. They'll share what they've done through creative presentations or displays.

Design	Use a simple spreadsheet or graph to record travel habits.
Decide	Choose a few offset actions (walking, planting etc.)
Record	Keep a travel / action log over weeks
Sustainability	Discuss with the group "what would happen if everyone did this"
Present	Present using a poster, video or small group presentation.

RANGERS

 (ages 14-18 years)

Rangers will take on the Offset Challenge by building a digital or written model of their weekly carbon use based on how they travel. They'll choose real-world actions to reduce or offset this impact, and record their progress over a month. Through team discussions and reflections, they'll consider how to make their approach more sustainable and scalable, finishing with a group presentation or display to share their findings and ideas.

Design	Use Excel or Google Sheets to calculate carbon use.
Decide	Choose realistic and meaningful offset actions, encourage creativity.
Record	Keep a digital or paper journal of progress over weeks.
Sustainability	Research sustainable habits and how small changes make a big difference.
Design	Present to the group using a slideshow, model or creative display.