

Great Western Air Ambulance Charity Challenge Badge Pack



Bristol & South
Gloucestershire County



WE DISCOVER, WE GROW

Girlguiding

Somerset North County



WE DISCOVER, WE GROW

Girlguiding



**Great Western
Air Ambulance Charity**

Your Charity, Saving Lives Together

Welcome to the Great Western Air Ambulance Charity Challenge Pack!

Thank you for making the incredible decision to support your local air ambulance.

You'll learn some important skills that will help you, should you ever be faced with someone going through what could be the worst day of their life.

It's this knowledge that we want to share with as many people as possible in the hope that we can all help to make really ill people better.

As you work through the tasks, you will learn about our life saving service and, as a charity, what you can do to ensure your local air ambulance can stay in the air.

We would **LOVE** to invite your unit up to our airbase in Almondsbury for a tour of our facilities! Let us know how well you get on with the challenge badge through social media (or snail-mail) and we'll welcome those units who've gone the 'extra-air-mile' to our airbase!

So what do you need to do now? Start by reading the introduction and then follow through the step-by-step guide in each section on how to get the most from your GWAAC Challenge Badge.

Remember, if you have any problems or questions get in touch with us! Contact fundraising@gwaac.com or GWAACchallengebadge@girlguidingbsg.org.uk



Introduction

The GWAAC Challenge Badge is divided into six sections.

To gain the GWAAC Challenge Badge you will need to complete at least one challenge **AND** one question from each of the six sections:



1 Aviation

Learn about our helicopter and design your own!
Can you get yours to fly more than 5 metres?
Compare your results with your friends and discuss what could make it fly further.

2 Medical

Learn how to deal with a life threatening situation and utilise basic life-saving techniques.

3 Charity

What does it mean to be a charity?

4 The Five Counties

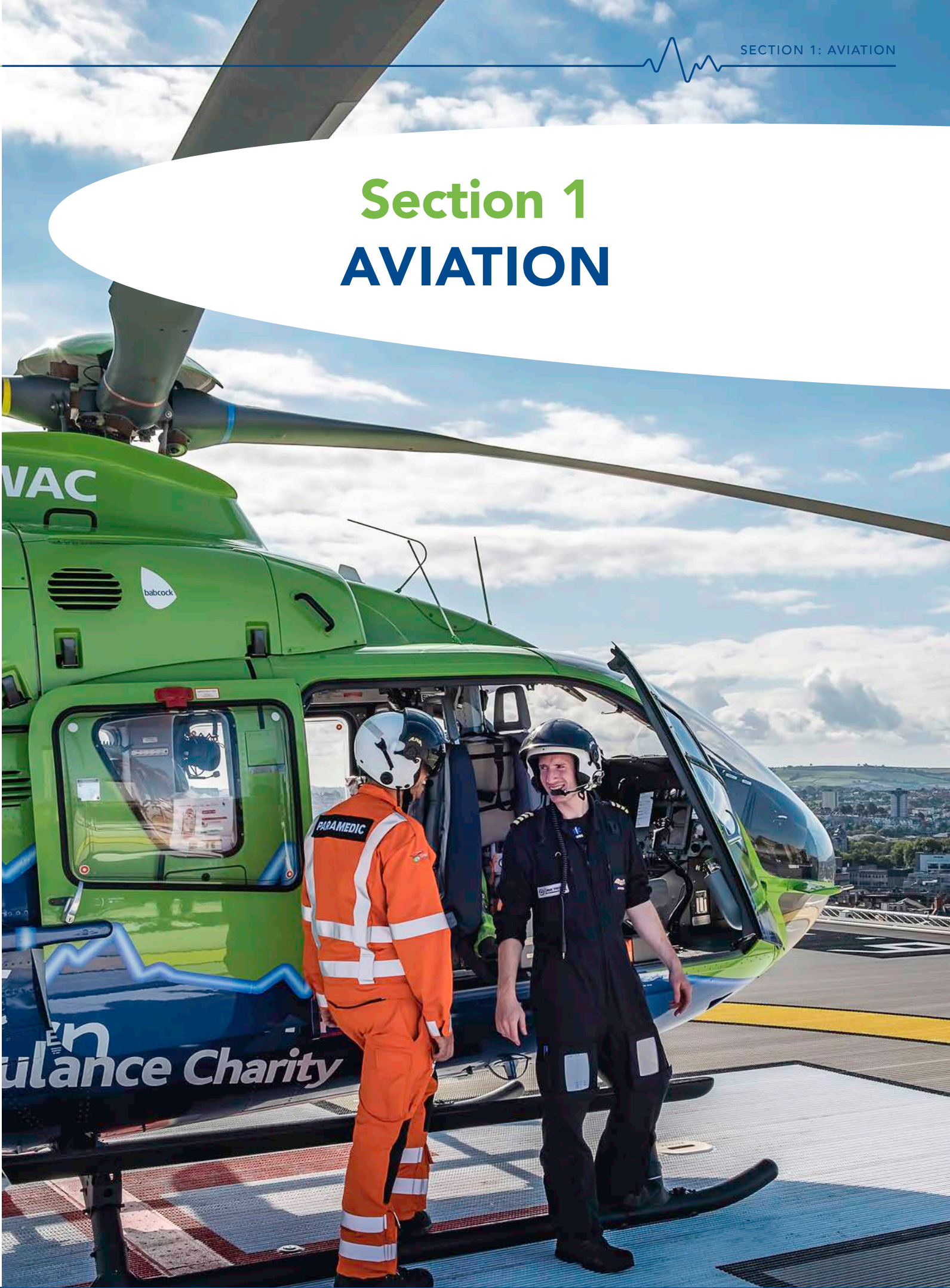
Learn about your area and do some research on what makes it special.

5 Our Crew

Everyone in the unit has a part to play in saving lives.

6 Fundraising Challenge

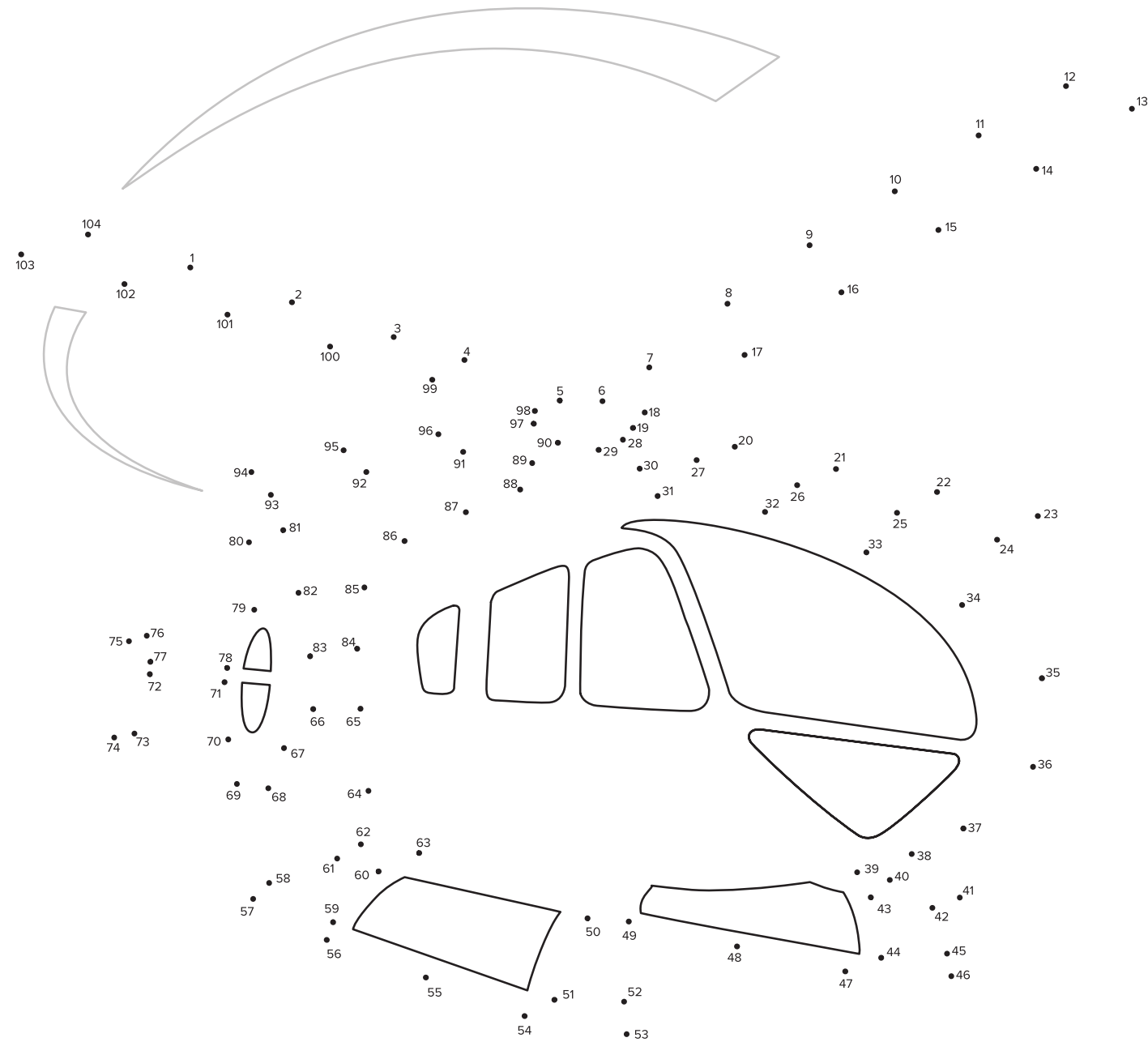
We couldn't keep it flying without you.
Explore ideas on how to help.



Section 1 AVIATION

Challenge 1

Complete the dot-the-dot helicopter and colour it in.



Essential Question:

What is our helicopter's maximum speed?



Extra Question:

Using the answer from above, how long would it take our helicopter to fly from our airbase to your house?



Challenge

Design and fly your perfect paper plane.

Colour it in and share a photo of it on social media tagging @GWAAC.

Optional Sticker Challenges

Famous 5!

Yesss...
My plane flew
5 metres

A Perfect 10

No way...!
My plane flew over
10 metres!

Master Modifier

My plane flew
further after my
modification

Analyse This!

My prediction was accurate and I proved it in my results

Nice Wings

I designed
and coloured in
my plane

Plane Sailing

I collected all
5 stickers!



Don't forget to draw Charlie the Critical Care Bear on your plane!

How will you ensure a fair test?

Fly your plane a total of 5 times.

Record your results below:

Control Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	

Why do you think it will fly a longer/shorter distance?

Experimental Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	

Did your plane fly a longer or shorter distance?

If different from your prediction, why do you think your plane flew further/shorter than after the modification?

Modify (change) your plane to determine whether the change will make your plane fly a longer or shorter distance.

Only make ONE modification.

Your modification is
(e.g. tape, paper clip, Blu Tack, cut bits off)

Do you predict that your plane will fly a longer or shorter distance?

Challenge3

Angry Charlie!

Bring along as many cardboard boxes of different sizes you can.

With some friends, stack them in different and interesting towers; a bit like you would see in the Apple/Android game 'Angry Birds'.

Select a few teddies of different sizes and weights (that you don't mind throwing!) and take a moment to predict which one will be the most successful at knocking over the most boxes.

Take it in turns to throw your teddies and make a note of your results.

Predictions:

Results:

Comments:



Challenge ★ 4 Marshmallow Launcher!

Your Mission:

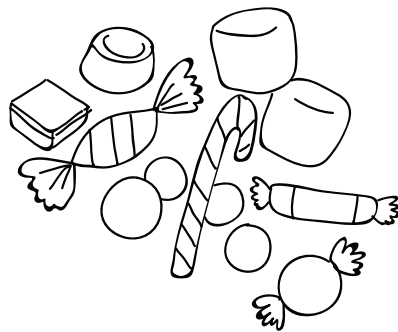
Create a confectionery cannon to launch your favourite (or least favourite) sweet as far as possible.

Will a tighter elastic band provide more or less power?

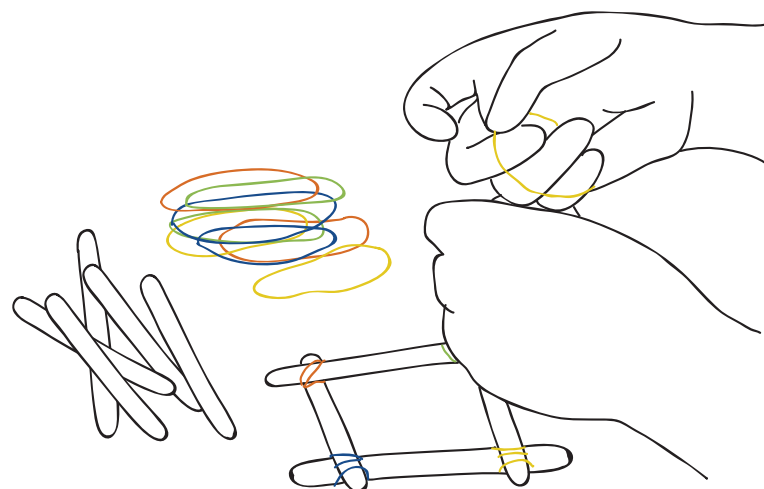
Instructions

You will need:

- 6 craft sticks
- 1 wooden spoon
- 9 rubber bands



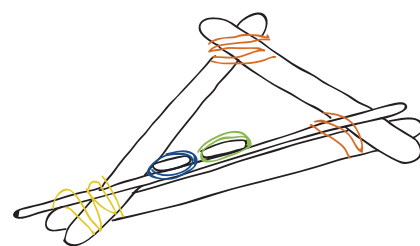
- 1** Start by making a square shape with 4 of the sticks.



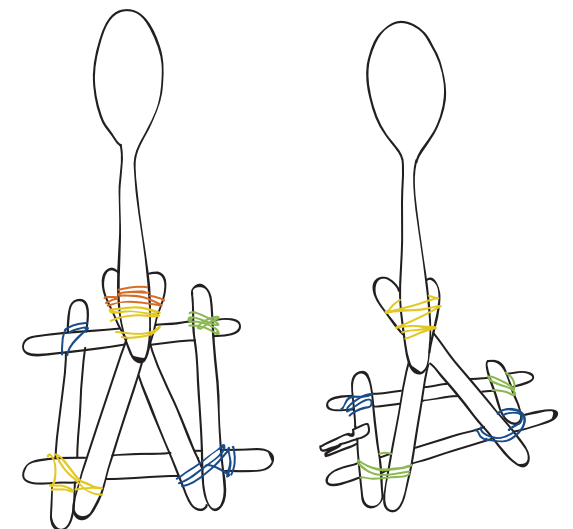
- 2** Use the rubber bands to secure the 4 corners together – this will make the base of your launcher.

- 3** Take 2 sticks and use a rubber band to attach them together at the top.

Use another rubber band to attach the wooden spoon to this.

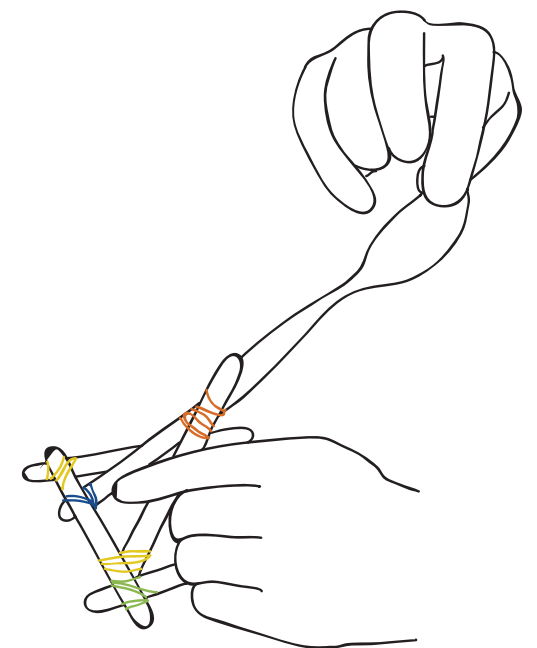


- 4** Use a rubber band to attach the edge of the stick to opposite corners of the base.



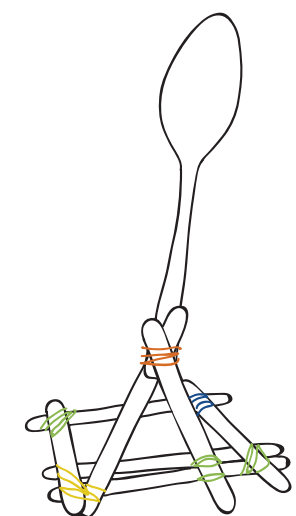
- 5** To use your launcher, hold the base firmly and add your sweet to the wooden spoon.

Gently pull it back then let go so that the sweet pings out!



Optional

- 6** To add more stability to the launcher, you can try adding a third stick to the triangle, as shown in this picture

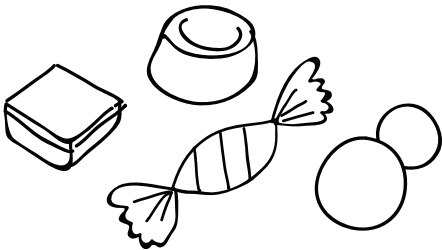


How will you ensure a fair test?

Launch your sweet a total of 5 times.

Record your results below:

Control Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	



Modify (change) your launcher to try and get the sweet to fly further.

Only make ONE modification.

Your modification is
(e.g. more elastic bands, tighter elastic bands, etc)

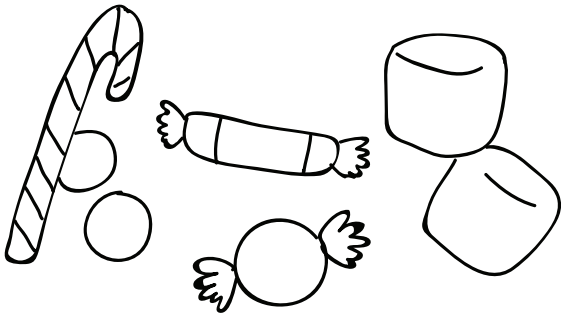
Do you predict that your sweet will fly a longer or shorter distance?

Why do you think it will fly a longer/shorter distance?

Experimental Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	

Did your sweet travel a longer or shorter distance?

If different from your prediction, why do you think your sweet flew further/shorter than after the modification?



Challenge 5

Build a helicopter or plane!

You can use lolly pop sticks, empty bottles, pegs or cardboard...

Ideas

Helicopter

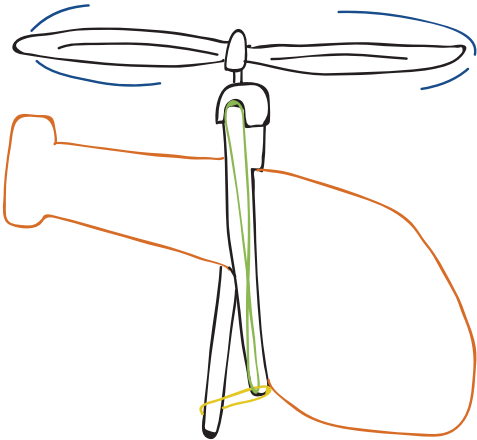
Using a clothes peg for the helicopter body, shape some cardboard to make the cab and secure it onto the clothes peg with glue or tape.

Attach a plastic rotor blade to the top and then use a paper clip to attach a rubber band to the base.

Stretch it upwards to join it to the rotor blade.

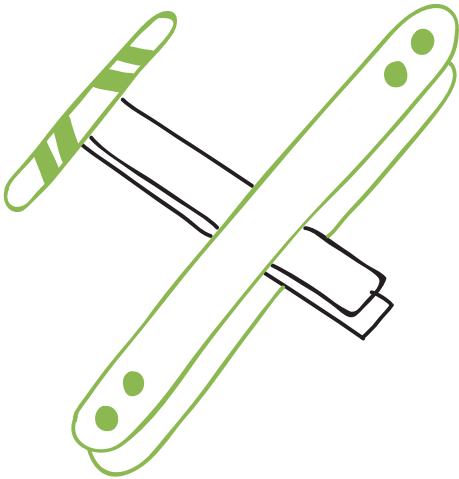
Spin it to see if it will fly!

You can get rotor blades from the toy shop, or try making some too.



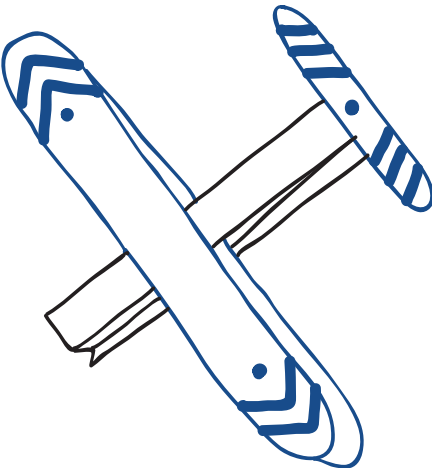
Plane

Make a toy plane using a clothes peg for the body, and wooden craft sticks for the wings.



Get Creative!

You could try using an empty plastic bottle for the body of your toy plane or helicopter, and shape some cardboard for the wings and propeller.

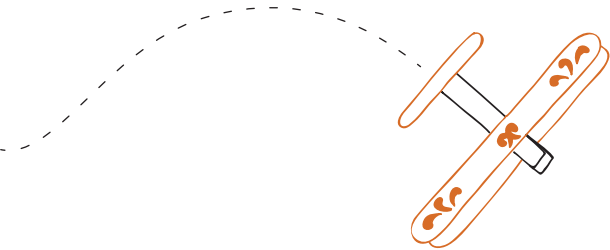


How will you ensure a fair test?

Fly your plane a total of 5 times.

Record your results below:

Control Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	



Modify (change) your plane to determine whether the change will make your plane fly a longer or shorter distance.

Only make ONE modification.

Your modification is
(e.g. tape, paper clip, Blu Tack, cut bits off)

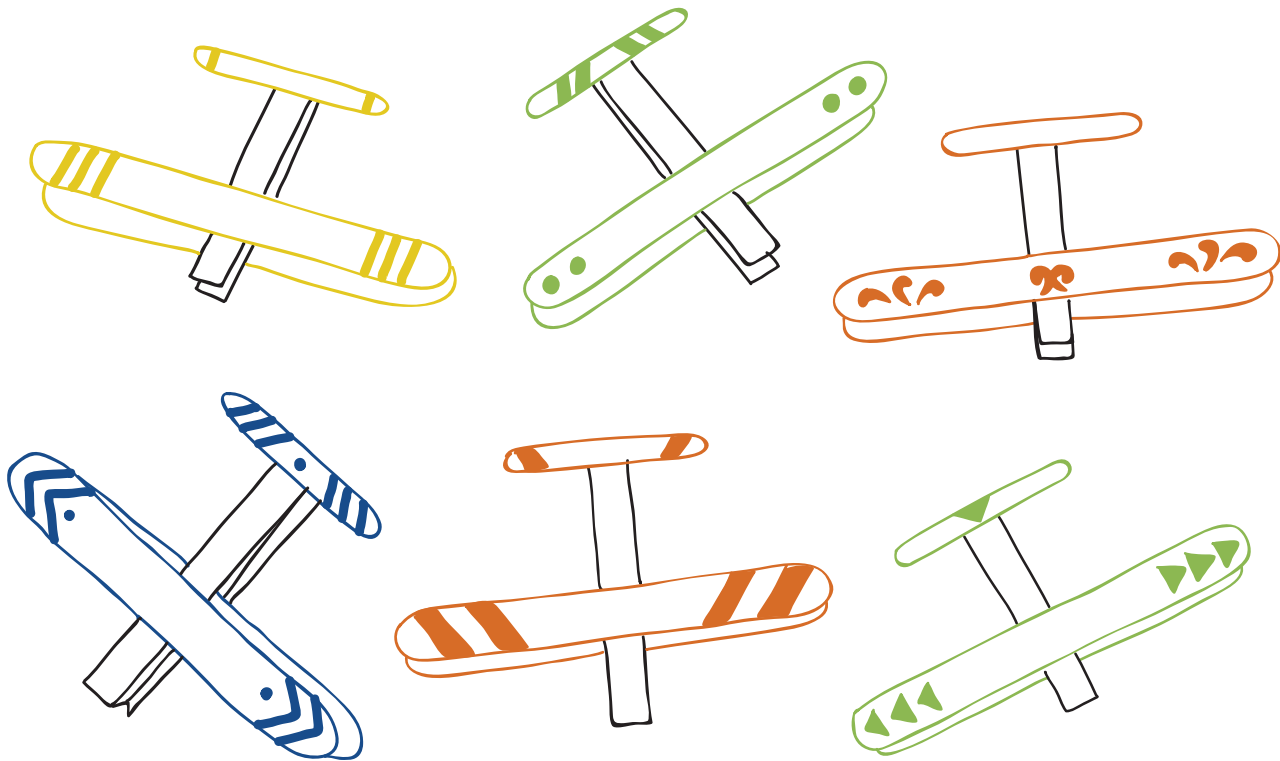
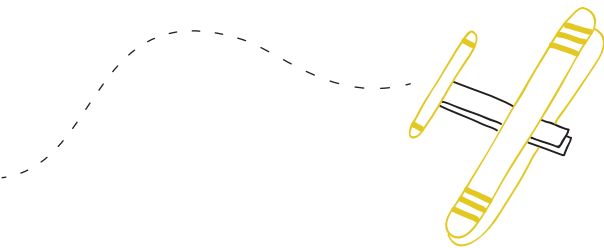
Do you predict that your plane will fly a longer or shorter distance?

Why do you think it will fly a longer/shorter distance?

Experimental Group	Trial	Flight in cm
	1	
	2	
	3	
	4	
	5	

Did your plane travel a longer or shorter distance?

Why do you think your plane flew longer or shorter after you made the changes?



Optional Sticker Challenges

Famous 5!

Yesss...
My plane flew
5 metres

A Perfect 10

No way...!
My plane flew over
10 metres!

Master Modifier

My plane flew
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modification

Analyse This!

My prediction was
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Nice Wings

I designed
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Plane Sailing

I collected all
5 stickers!

Challenge 6

Parachute Charlie into the incident zone.

Charlie needs your help to get as close to the incident site as possible, as quickly as possible.

Mark an incident zone like a bullseye, strap Charlie (or a Lego character/bear if you don't have a Charlie) to a large handkerchief/ coffee filter paper (ask a parent!) with 4 pieces of string and drop him from a height.

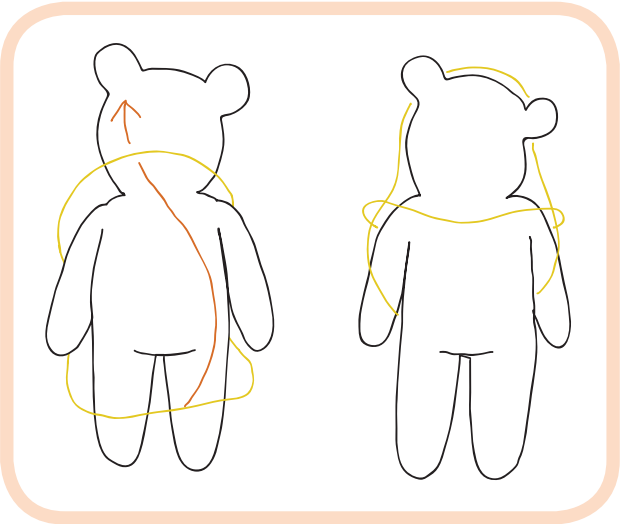
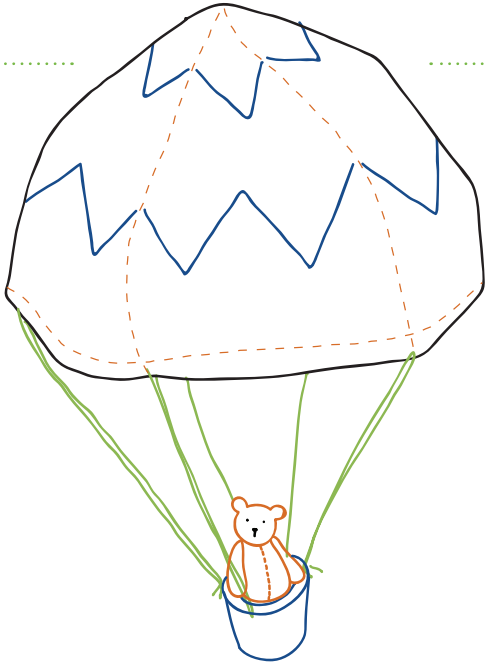
Remember to think scientifically.

How will you ensure a fair test?

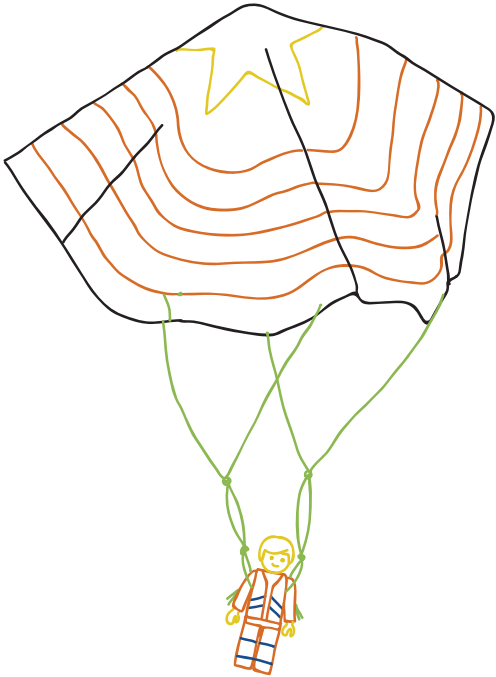
Drop Charlie a total of 5 times.

Record your results below:

Control Group	Trials	Distance from bullseye in cm	Time from drop to landing in seconds
	1		
	2		
	3		
	4		
	5		



You can make Charlie a safety harness from a rubber band like this.



Modify (change) your parachute to determine whether the change will make Charlie fall quicker or slower.

Only make ONE modification.

Your modification is
(e.g. tape, paper clip, Blu Tack, cut bits off)

Do you predict that Charlie will fall quicker or slower?

Why do you think it will be quicker or slower?

Experimental Group	Trials	Distance from bullseye in cm	Time from drop to landing in seconds
	1		
	2		
	3		
	4		
	5		

Did Charlie fall quicker or slower?

If different from your prediction, why do you think Charlie fell quicker or slower?

Challenge 7

Wind Chime time!

Find some old CDs, bottle caps, bottles, shells, beads and attach them to some string of varying heights.

Hang your wind chime up outside and hear the wind's music!



Section 2 MEDICAL

Learn how to deal with a life threatening situation and utilise basic life-saving techniques.

Essential Question:

How long do you think it takes an ambulance to arrive after the first 999 call?



Read through your age-appropriate First Aid activity sheet:

- **Level 1**
CPR word search & DR (danger, response)
- **Level 2**
DRABC (danger, response, airway, breathing, circulation)
- **Level 3**
DRS-ABC (danger, response, shout, airway, breathing, chest compression)
- Hazard perception: Can you identify all the hazards in our 'Where's Wally' style cartoon?
- Discuss with a friend what you would do differently to stay safe in these situations
- Create a stretcher for a teddy and have a stretcher race with some friends!
- Teach a parent/guardian/friend the steps in your level 1 or level 2 guide...





Can you find...

- | | | |
|--|--|--|
| <input type="checkbox"/> The GWAAC helicopter | <input type="checkbox"/> A Girl Guide | <input type="checkbox"/> A fire |
| <input type="checkbox"/> A paramedic | <input type="checkbox"/> A Scout | <input type="checkbox"/> A mischievous cat |
| <input type="checkbox"/> A doctor | <input type="checkbox"/> Charlie Bear | <input type="checkbox"/> 4 piles of sweets |
| <input type="checkbox"/> The GWAAC critical care car | <input type="checkbox"/> Someone falling off a ladder | <input type="checkbox"/> 5 paper planes |
| <input type="checkbox"/> A GWAAC helicopter helmet | <input type="checkbox"/> Someone not looking where they're going | <input type="checkbox"/> 2 pairs of sunglasses |
| <input type="checkbox"/> A defibrillator | | <input type="checkbox"/> 3 hungry chicks |

Medical Level 1: Conscious

Skills:

- ✓ Check for **D**anger
- ✓ Check for **R**esponse
- ✓ Call 999

Starter Activity: Word search

When you find a word, discuss with a friend what you think it means

G O T P T I U P A L D X Z O B
L L A L D R V M B J W T Q O R
N E N X B I B F S E O Y K L E
U G P Z H U U G M M N N N F A
E I A F L Y U P B X R N W C T
M D B A A L R F H T G B F U H
T Y N W V V O A O G O W E S I
I C R E S N O P S E R I A J N
E I C E J N Y C R R F K K A G
A Z Y Q V S I I I E F F V T C
N T S O W O N J E G K A V D W
S H O U T C C N S N N B E E E
K I O U L P M E X A R Q R P T
Z A S K L Q C A R D Q J J W N
R S I T H D O T P T G D B M U

- Airway
- Ambulance
- Breathing
- Danger
- GWAAC
- Recovery
- Response
- Shout

Story

Your unit leader will read part 1 of the story out loud to you.

Once you have heard part 1 talk to the person next to you about what you would do.

Take it in turns to describe what you would do if you were in Billy's position.

Your leader will then ask you to feed some responses back to the group before reading part 2.

Ask yourself questions about why Billy did what she did and feed this back to the group.

Task

In pairs or threes, act out the scenario ensuring you all take it in turns to be Billy and Grace.

Extra task:

Think about other dangers in typical environments (e.g. a school classroom or crossing a road).

Extra task:

How can you tell if someone is awake or unconscious?

Medical Level 2: Unconscious

Skills:

- ✓

Check for **D**anger
- ✓

Check **B**reathing is normal
- ✓

Check for **R**esponse
- ✓

Place in recovery position
- ✓

Shout for help
- ✓

Call 999
- ✓

Open **A**irway

Starter Activity:

Your unit leader may ask you to read part 1 in a group or to the unit as a whole, in either case stop after part 1 and discuss with the person next to you what you would do next if you were Gary.

Part 1

Gary has gone cycling with his mother along the Bristol to Portishead cycle path and he decides to race ahead of his mother.

He passes a young boy lying face down on the ground next to his bike.

Part 2

Gary checks for danger, then gets off his bike and kneels down next to the boy and gently shakes his shoulders to see if he is awake.

He is unconscious so Gary shouts for help, then opens his airway and checks he is breathing normally.

He puts the boy in the recovery position.

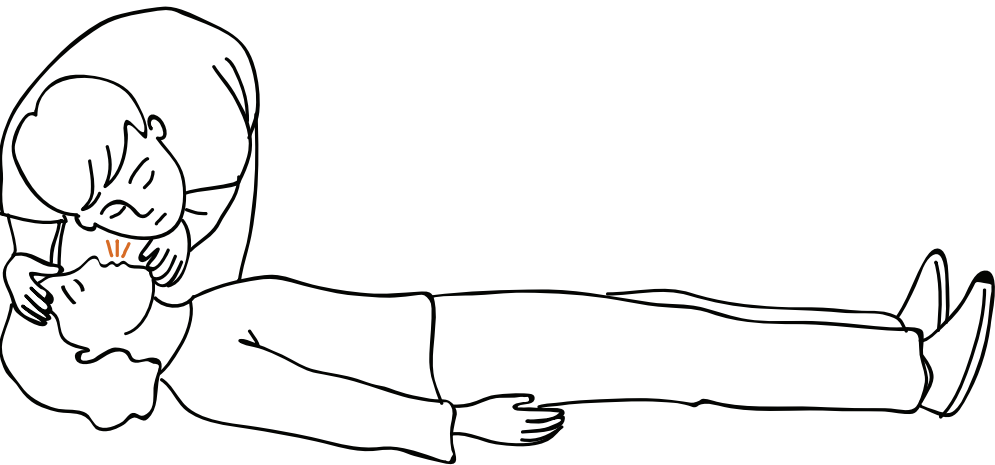
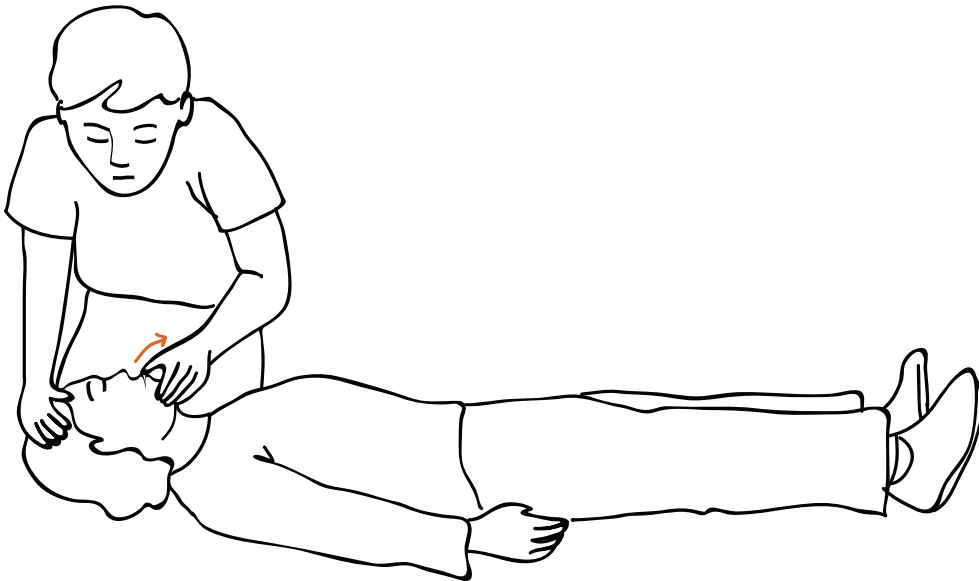
His mother arrives and he tells her to dial 999 for an ambulance.

- Why does Gary not immediately run over to the boy?
- Why does Gary gently shake the boy?
- How does he check if he is breathing normally?
- What position does he move the boy's body into?

Task

Divide into pairs and act out the scenario, taking it in turns to be the boy and Gary.

Check for danger, check for response, shout for help, open airway and check for breathing.



- Open the airway as shown above
 - Straighten the legs
 - Move the arm nearest to you so that it looks like the arm of someone stopping traffic
 - Bring the other arm towards you and under the person's cheek
 - With your free hand lift the person's leg furthest from you so that it bends to a right angle and then pull the person towards you so they roll onto their side
- Once on their side make sure the airway is still open by tilting the head back and using their hand to keep it there

- Take it in turns to practise putting each other in the recovery position
- If there is time, practise the whole scenario from the beginning

Medical Level 3: Cardiac Arrest and CPR

Skills:

DRS ABC

- ✓ Check for **D**anger
- ✓ Check for **R**esponse
- ✓ **S**hout for for Help and call 999
- ✓ Open **A**irway
- ✓ Check **B**reathing is normal
- ✓ Chest **C**ompressions (CPR)

Starter Activity:

Watch Trevor Hings’ video: <https://bit.ly/2XdZ4L5> or read the script if no facilities.

Watch the video and look out for something important that Trevor mentions towards the end...



Main Activity

Read Part 1 as a group and wait for your group leader before reading Part 2.

Part 1

Alice walks home with her elder brother and they stop in the park to play football.

After a quick kick around, her brother slumps to the ground and stops moving.

- What would you do if you were Alice?

Bring in a large teddy bear if you have one!



Part 2

Alice is worried but checks around for any danger and runs over to her brother.

There is no response when she gently shakes him by the shoulders and asks if he is OK.

Alice shouts for help at the top of her voice and opens his airway.

She checks if his breathing is normal but cannot feel a breath and realises he has stopped breathing completely.

She thinks he has had a cardiac arrest and tells someone who has run over to call 999 for an ambulance.

Alice begins giving CPR and does 30 chest compressions, pauses and then delivers 30 more until the paramedics arrive.

Exhausted, she sees the paramedics using a machine they call a defibrillator (AED) to restart her brother’s heart before taking him to hospital where he makes a full recovery.

- Talk in pairs about what skills Alice has used and why they are important e.g. what does Alice do when she notices her brother isn’t breathing?

Task

Practice CPR on your teddy bear in pairs with one member commenting on the other’s CPR technique:

Explain that **DRS** has already been done

A Open airway - head tilt - chin lift

B Check for normal breathing – if no breathing, abnormal breathing or unsure, start CPR

Emphasise starting as soon as possible, turn the person on their back.

C Chest compressions

Kneel next to person.

Put heel of one hand in centre of chest, heel of second hand on top and interlock fingers.

Position vertically above with arms straight and press down 5-6cm.

Release fully (but not removing hands from chest) after each compression.

Aim for a rate of 100-120 per minute (consider ‘Stayin’ Alive’ or ‘Poker Face’).

Give 30 compressions.

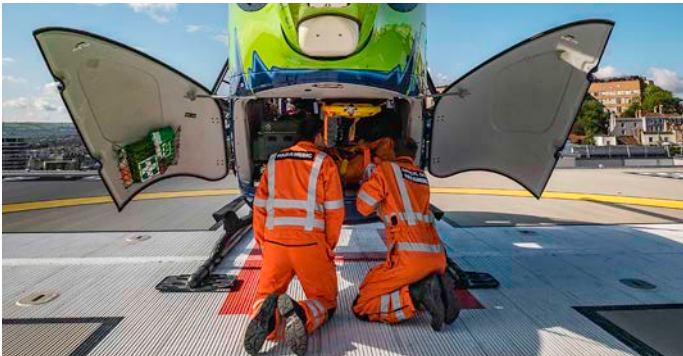
Explain to alternating rescuer if more than one person available.

Continue until help arrives or too tired to continue.

Get AED/defibrillator if more than one rescuer, continue CPR.

Stop CPR if the person shows signs of life (coughing, movement, eye opening etc.)

If regurgitation (not uncommon) – **recovery position** for few seconds, then resume CPR.



Section 3 CHARITY

What does it mean to be a charity?

Essential Question:

How much money do we need per year to stay flying? →

Extra Question:

Why do we need more money every year to operate the same service? →

Challenge 1

Air Your News

Write an article about what you're doing for GWAAC using the 'PR Instructions' and 'PR Template'.

Send it into your local newspapers/parish magazine/ radio station and see if you can get it published! e.g. Bishopston Matters, Keynsham Voice, Thornbury Gazette.



Challenge 2 Charity Parity

The following charities need your help! Can you help them design their leaflets?

Leaflets will help the public understand the cause and why they should support it – remember to use lots of persuasive language to encourage people to support your cause. See our leaflet in the Annexe for inspiration

You can make up your own charity that means something to you if you wish.

What are you trying to protect or prevent from happening? For example, our charitable objective is that 'we provide emergency care to people who are in a state so critical that they require the specialist skills of our team at the scene of the accident or medical incident.' Or feel free to design a leaflet for one of the following (made up) charities:

A Dog's Wish

A charity focused on giving retired police service dogs a happy retirement.

A Donkey's Dream

A sanctuary for injured or abandoned donkeys giving them an open field to roam in with plenty of food.

Food for Niger

Niger is a country in Western Africa that is one of the poorest in the World. The Food for Niger charity raises funds to pay for goats, chickens and pigs for some of the poorest in this country – it is hoped that these animals will help to beat poverty by providing these farmers with an income and the means to earn a living.

Challenge 3 Charities Rock!

Find a rock, clean it using warm soapy water and when it's dried paint a message or picture that symbolises something to do with your interpretation of 'charity'.

This could be around friendship, community, giving, thinking of others or another word that you feel has an association with what you understand charity to mean.

After you've painted or decorated your stone, swap with a friend and place it in your garden, bedroom or somewhere meaningful to you (not on a path or where somewhere could trip on it!).



Challenge 4

Charlie's Hat

Design and make a hat for Charlie!

He's a bit cold so would really appreciate your help. Pilot's hat? Winter hat? Baseball cap?

Your group could club together to buy a Charlie and then take it in turns to show off his new hat wardrobe!

Remember to tag @GWAAC if you're sharing online so we can give our opinion too!

There are LOADS of different materials you can use... knit a wool hat, cardboard, coloured tissue paper, an old sock. And how will you accessorise Charlie's hat? Maybe with a feather? Or some sequins?



Challenge 5 Build Our Base Time Machine

Right Guides, the crew need your help.

They've somehow found themselves in 2016 (they think they may have discovered a wormhole somewhere above Thornbury), which means they're still flying from our old airbase!

The crew are fed up with their old hangar in Filton; it's cold, leaks and they share it with a few vermin friends that steal their food.

They need a brand new airbase to store their helicopter, equipment and be a base of operations for their work.



Can you build them a new base?

You can:

- Draw it like an architect's drawing
- And/or, make it out of cardboard boxes
- Design it on a computer
- Paint a picture of it

Share your drawings with us so we can showcase them at our airbase!



Section 4

THE FIVE COUNTIES

Learn about your area and do some research into what makes it special

Essential Question:

Which counties does GWAAC cover?



Extra Question:

What other air ambulances are there in the South-West of England and what counties do they cover?



Challenge

Learn about another county by staying at one of our properties (girlguidingbsg.org.uk/index.php/properties).

What did you learn about this county?



Challenge

Did any famous people grow up or live in your county?

What did they do and did they improve our society, in your opinion?

After you've researched them, immortalise them by painting a portrait of them (you could use paint, crayons or graphite?)



Challenge

Design and create your county's flag.

Don't forget to bring it along to your next camp!

Why not accessorise it with glitter, coloured tissue or other funky materials that you might associate with your flag.

Challenge ★4

County Collage

Collect different images that symbolise your county to you and stick them down onto a piece of paper.

Apples? Fields of crops? Built up urban environment?

Share it with a friend and discuss why you chose these images. Do you have a story that connects the image to memories you have of your county?



Challenge ★5

Farm Bowling!

You'll need at least 6 empty toilet rolls; design a farm animal for each loo roll, cut it out and stick it onto the length.

Stand each loo roll upright with the animals facing you and use a tennis ball or similar to play bowling with some friends!

Did any of you manage a strike? Moo-vellous!



Challenge ★6

Banksy Time

Stick up some plain paper on a wall at your unit hut.

You all need to create a stencil of your favourite building/person/landscape in your county and paint around it on your paper wall.



Challenge ★7

Cheese Rolling!

Grab your Babybel and head for the hills.

Make some predictions as to which cheese will roll fastest and/or furthest.

Will yours be Edam good roller or a Stinking Bishop?



Section 5
OUR CREW



Everyone in the unit has a part to play in saving lives

Essential Question:

Research GWAAC and write down the different roles within our crew...



Challenge 1 Dress to Impress

Bring in some old clothes and props and try to dress up as one of our crew members!

Or draw a new and improved version of our kit!

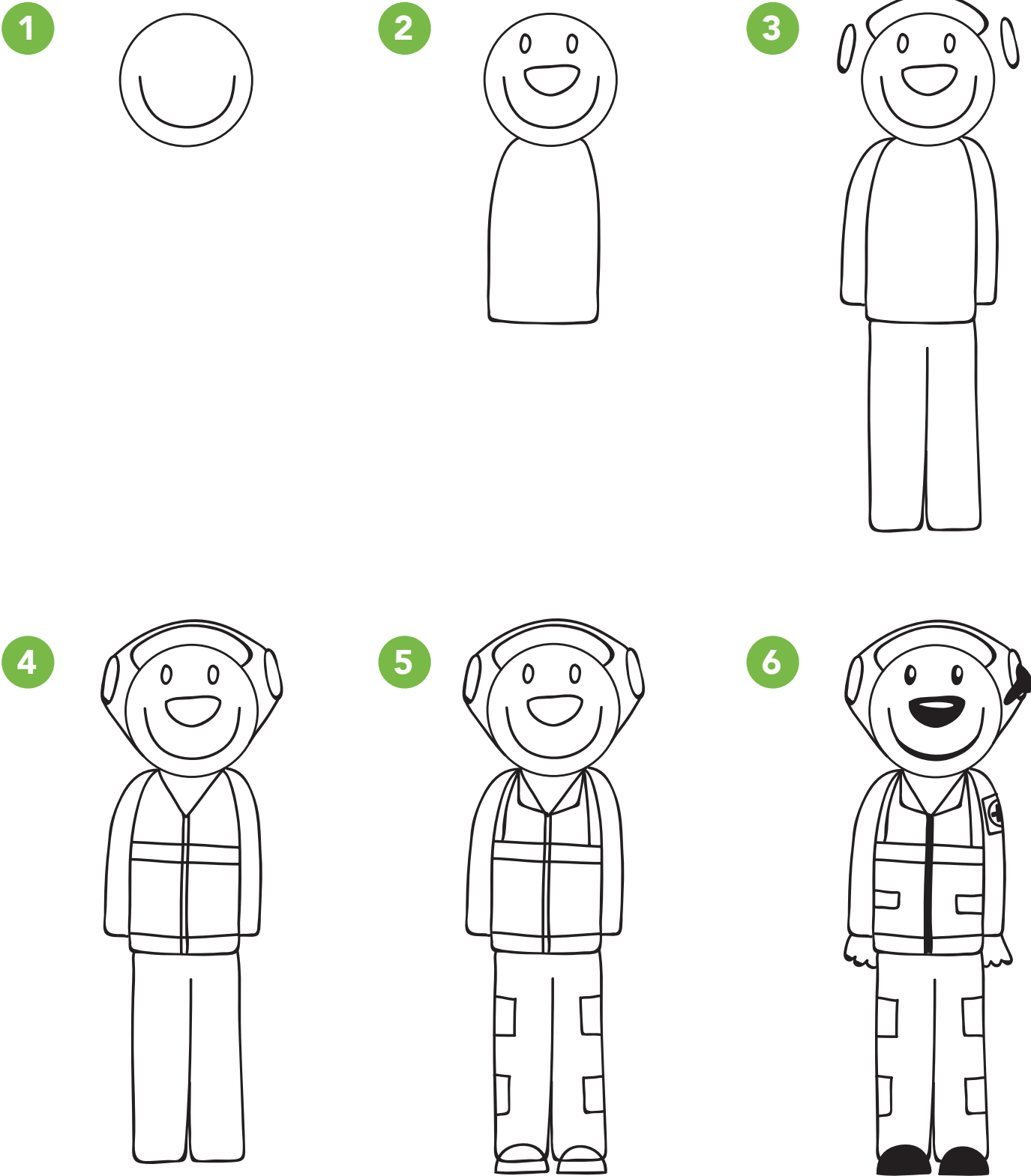
Don't forget to explain why you've chosen your features...maybe you'll give your kit reflective tape so the crew can be seen clearly by reflecting light in the dark?

Or maybe they need wings so they can jump out of the helicopter to respond to an emergency even quicker?

Design and show off your own uniform by tagging @GWAAC.

Challenge 2 Take Critical Care of Charlie

Draw Charlie the Critical Care Bear using the guide below



Challenge ★3

Aim High!

Do you want to become a pilot?

Research what qualifications you need at school to become a pilot, what you need to do after you've got those qualifications and talk to a friend about what aircraft you want to fly.



Challenge ★4

Flying Heroes

Create a comic book/cartoon of the crew attending a job.

Will Charlie pop up in any of the drawings?



Challenge ★5

A Great Western Novel

Write a short story about the crew or Charlie.

Will you write it in the 1st or 3rd person? 1st = I, me and refers to a writing style as if the character was writing the story, whereas 3rd person = he, she, they, Jack, Jill, etc. and refers to a writing style as if the writer is observing the characters, like a fly on the wall.



Challenge ★6

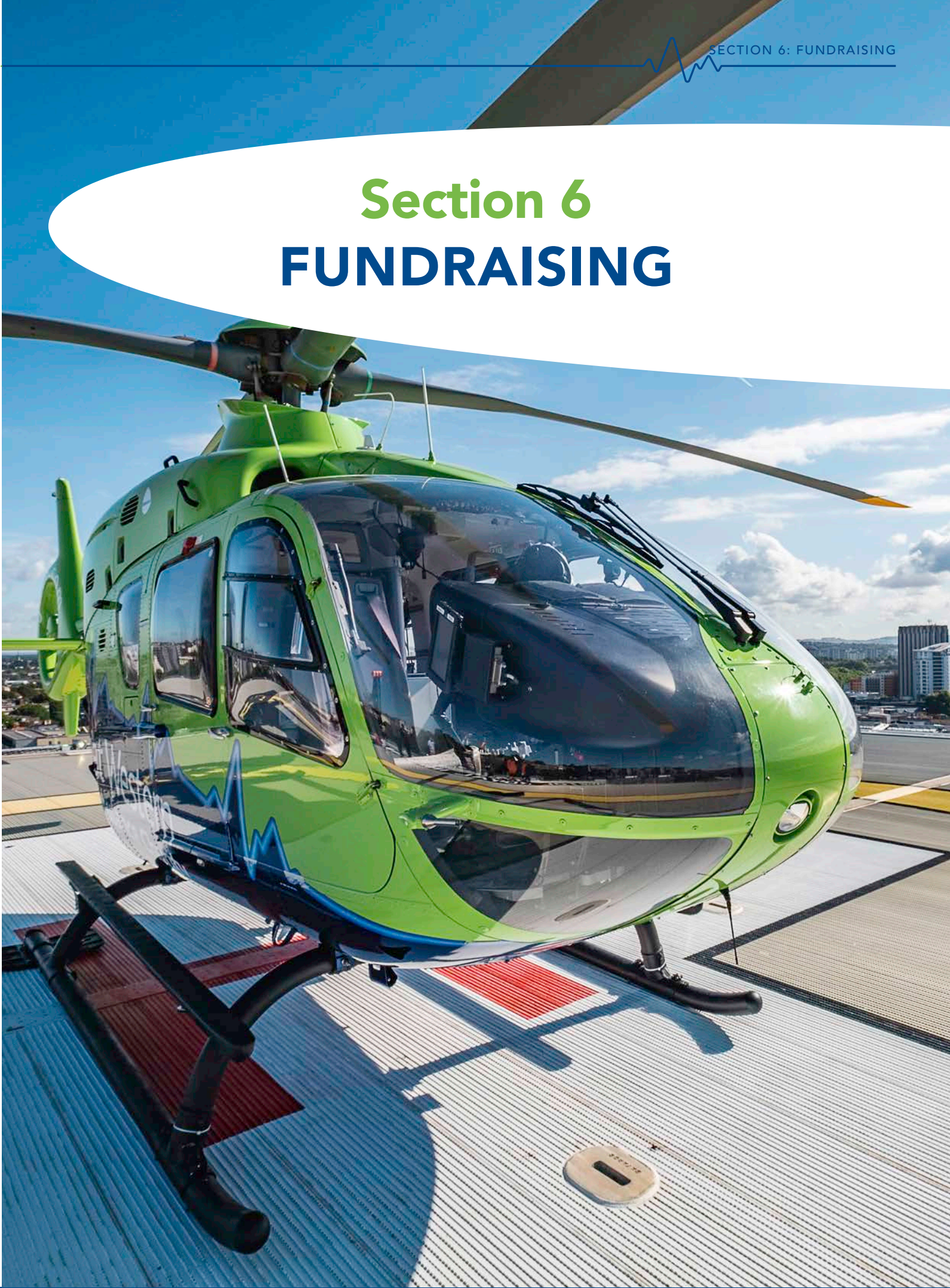
Art Attack

Check out our crew on our website and draw a picture of them!

Don't forget to tag @GWAAC on social media so our crew can thank you for their picture! Or post them to us.



Section 6
FUNDRAISING



We couldn't keep it flying without you.
Explore ideas on how to help!

Essential Task:

If it costs us £3.00 per mile
(extra task: £2.97) for fuel, work out
how much it would cost to pay for just
the fuel if we flew from our base in
Almondsbury to your home / school /
guide hut.



Can you try and raise as much as you can towards the amount it costs
to fly from the base to your unit meeting place?

Every penny raised as part of this challenge badge will make a difference!



Check www.gwaac.com/girlguides for more fundraising ideas or
choose from the following suggested ideas:

- Sponsored silence – do you have the gift of the gab? Put your money where your mouth is and ask people to sponsor you to stay silent for 2 hours...4 hours... a whole day???
- Bake cakes! Can you design one with a GWAAC theme? Surely no one can create a helicopter cake? Share your photos with us via Instagram, Facebook or Twitter (@GWAAC). Sell them to your teachers, friends and neighbours.
- Create a song about GWAAC and perform it to a paying audience...think of the choreography to accompany your song! Maybe you could get it on the radio.
- Set up a car wash.
- Bag pack at your local supermarket – maybe your Guide Leader can arrange for all of you to do this? Don't forget to ask us for collection buckets!
- Participate in a sponsored walk or run in aid of GWAAC and collect sponsorship from family, friends, neighbours and teachers! If you fancy something different, perhaps a few of you can get together and plan a sponsored walk?
- Get your friends/family to sponsor you to do chores (use our '15 things to give you wings' form).
- Collect loose change in a home collection box (maybe fine your parents/guardians if they mention homework).
- Organise an Easter egg hunt – can you get a local newsagent to contribute eggs?
- Find your nearest river/stream and organise a 'pooh-sticks' tournament. £1 to enter.
- Create a GWAAC themed quiz and charge people for entry.
- Helicopter coin trail – mark out our helicopter in chalk and see if you can cover the outline with coins! Remember to take a photo!
- Run a football competition with other Girlguiding groups.
- Treasure hunt – put together a treasure hunt, split into pairs or teams and let the detective work begin! Ask a local business to donate a prize for the winning pair/team, and set a suggested donation amount for entering.



Great Western
Air Ambulance Charity



FUNDRAISING
REGULATOR

Registered Charity Number: 1121300