

## AIR OR SEA NAVIGATION

Be the one who knows the way to go – at sea or by air. Learn a skill that would help you navigate your crew on your journey.

### How to earn your badge

Option 1: air

- Using simple diagrams, illustrate latitude and longitude.
- Using a compass, show how an aircraft can be turned on to various compass headings.
- Show that you understand how a compass works, including the difference between magnetic, true and grid north.
- Explain what magnetic deviation is and how it applies to air navigation.
- Show that you know about the latest developments in electronic navigation aids.
- You'll be given three headings and corresponding tracks. For each one, work out the amount of drift in degrees and the type. Show your answers by drawing a simple diagram.
- Complete one of these:
  - On a topographical air map, draw a track for an imaginary flight of at least 80 nautical miles. Point out the landmarks that would show up on both sides of the track, in clear visibility, at an altitude of about 600 feet.
  - Identify landmarks on a topographical air map that you would see during a flight of about half an hour in clear weather.
- On a topographical map, draw the track between any two places at least 100 nautical miles apart. Measure the exact distance.
- Show that you can calculate overhead flight times, using the air speed of an aircraft, and adjust your calculations for head and tail winds of different speeds.

## AIR SPOTTER

Can you tell an Airbus from a Boeing. Take up your binoculars, look to the skies and go for the Air Spotter activity badge.

### How to earn your badge

- Learn to recognise 38 out of the 50 aircraft listed in The Scout Association's Aircraft Recognition List.
- Complete one of these activities:
  - By yourself or with another Scout, take photographs or collect pictures of at least 10 different aircraft types. Name the different types and their uses.
  - Visit an airfield or airport viewing area, for at least an hour. Record the aircraft you spot, including any distinctive features and the aircraft's approximate heading.
- Complete one of these activities:
  - Recognise and name the national aircraft markings, both service and civil, of at least six countries including the United Kingdom.
  - Learn the RAF and NATO system of letter designation according to aircraft function. Give examples of three designations.
  - Name three basic training aircraft used in private flying. Give a brief report on one, naming a club and airfield where it is used. Try to make it a local airfield, if possible.
- Describe the main features you would use to recognise six aircraft, which have been chosen by an appropriate adult.

## AIR RESEARCHER

Find out more about one of human's greatest accomplishments – developing the technology to fly through the air.

### How to earn your badge

- Research one historical aspect of flight, and share what you find out with the Troop. You might like to find out about:
  - the development of aviation or flight over a period of time agreed with your leader
  - balloons or airships, from their first appearance to the present day
  - a type of aero engine, such as a jet or piston engines in general, or a specific engine like the Rolls Royce Merlin
  - the development of an aircraft type, like a Spitfire, Boeing 747, Harrier, Stealth Bomber, space shuttle or the Wessex helicopter. You could find out details about its history, role and achievements.
- While you're doing your research, visit at least one place of interest that relates to your chosen subject. It could be a museum, an air display or an aeronautics factory.
- Present what you have found out. Your presentation should include a model that you have made based on your subject. You should also include diagrams and pictures wherever you can.

## ASTRONAUTICS

A smart man called Carl Sagan once said, 'Somewhere, something incredible is waiting to be known.' Start your journey of space exploration here, and who knows? Something incredible could be waiting for you.

### How to earn your badge

- Find out how craters are formed, and what meteorites tell us about the universe. You could experiment using marbles, rubber balls or stones as meteorites, and a tray filled with sand as your planet/moon surface.
- Compare satellite images of Mars and the Moon with satellite images of Earth. Point out similar landscape features such as craters, valleys and volcanoes. Discuss what Earth observation can tell us about the land, sea and atmosphere.
- Build your own satellite dish. Discuss what everyday items rely on satellites.
- In a group, debate about life elsewhere in the universe. What might it look like? How do we search for life on other planets and moons? How would the human race react to the discovery of life elsewhere in the universe?
- Find out about the International Space Station and how astronauts live and work on board.
- Research a current space mission, such as a mission to Mars. Then, design a model of your own space probe or other spacecraft, including the instruments on board that enable it to complete its mission.
- Build, launch and recover a model rocket. Think about the shape of your rocket and why that's important. Make a second launch to achieve a specific objective, such as reaching a certain height or carrying a fragile payload, like an egg.

## ASTRONOMER

Would you like to navigate the night sky, from the Big Dipper to Orion's Belt? Take up your telescope and become an astronomer.

### How to earn your badge

1. Show what you know about the night sky and why the pattern of stars changes, night by night, throughout the year.
2. Learn the meaning of the terms celestial, equator, poles, circumpolar and zodiac.
3. Build a model of the solar system using everyday materials found in the home, such as different size fruit or sports balls. Use an outside area to scale the solar system.
4. Explain how the Moon affects the tides.
5. Build a telescope from two cardboard tubes or two A4 pieces of black card, and lenses. Compare what you can see through a telescope and what you can see with the naked eye.
6. Observe three constellations on a clear night and record what you saw.
7. Read a star map using a compass and red light. Compare the differences between using a star map and a normal map.
8. Learn how to identify a satellite. How do you tell it apart from an aeroplane, star, planet or a meteor? Then complete these activities:
  - a. identify a satellite to observe
  - b. choose a clear night and use a clock and a compass to help you observe the satellite
  - c. plan an evening with your Scout Group and teach others how to observe the satellite

## ATHLETICS PLUS

The name says it all – improve on what you've learned through the Athletics badge and reach new targets.

Before you attempt Athletics Plus, you must hold the Athletics activity badge.

### How to earn your badge

1. Run through an appropriate warm up and warm down routine using all the main muscle groups. Explain why both routines are important.
2. Talk about the safety rules for athletics, particularly throwing and jumping events.
3. Compete in any three events (two track and one field, or vice versa) and gain the points set out as indicated on the score chart below.

Points	Distance				
	100m sprint sec	200m sprint sec	400m sec	800m min	1500 m min
10	13.4	28.0	64.0	2.30	5.10
9	14.0	28.8	67.0	2.40	5.25
8	14.7	31.4	71.0	3.00	5.45
7	15.3	32.6	75.0	3.10	5.50
6	15.8	33.2	79.0	3.20	6.20
5	16.3	34.0	83.0	3.40	6.50
4	16.8	35.5	88.0	4.00	7.30
3	17.6	38.3	94.0	4.20	8.00
2	18.3	40.0	100.0	4.40	8.30
1	20.0	45.0	120.0	5.00	9.30

  

Points	High Jump Mtr	Long Jump Mtr	Shot Mtr	Discus Mtr	Cricket Ball Mtr
10	1.60	5.00	9.5	35.0	65.0
9	1.40	4.75	8.5	29.0	55.0
8	1.30	4.40	7.2	22.0	50.0
7	1.25	4.20	6.5	17.0	45.0
6	1.20	4.00	5.5	14.0	35.0
5	1.00	3.75	4.1	12.0	30.0
4	0.90	3.30	3.7	10.0	25.0
3	0.85	2.80	3.3	9.0	20.0
2	0.80	2.45	2.8	8.5	15.0
1	0.75	2.10	1.8	6.0	10.0

  

Minimum points total for the award of badge	
Age	Points
Under 11	6
Under 12	9
Under 13	13
Under 14	17
Under 15	22

### Guidance for leaders:

- Ideally young people should work towards this badge as part of a Scout activity. If that is not possible, they may use timings or distances they have achieved at school or other athletic events. A teacher or athletics coach can confirm these timings.
- For the field events, we recommend the shot weighs around 2.73kg, the discus 1kg and the cricket ball 0.135kg

**! Young people must be especially careful when doing the high jump. They will have to think about the way they are going to jump, land and what they are going to land on. They must use proper equipment at all times and unless expert tuition and supervision is available they must not attempt the Fosbury Flop. The scissor jump is an easier way to do it.**

## DIY

Would you like to be handy around the house? Learn how to deal with emergencies and tackle DIY projects – you'll be in the good books with your family and achieve something to be proud of.

### How to earn your badge

1. Show you can work safely and know about the following:
  - hazard symbols and signs (for dangers such as toxic, flammable, irritant, electrical danger or slippery surface)
  - safety equipment (such as goggles, gloves, masks, ear defenders)
  - how and where to turn off mains supplies (such as water, electricity and gas) to the house.
2. Learn how to safely isolate individual electrical circuits at the consumer unit. This includes letting other users know that work is being carried out.
3. Show or explain how you would deal with four DIY emergencies for example:
  - unblocking a sink
  - patching a leaking pipe
  - adjusting the float arm of a cistern
  - changing a lightbulb
  - hinge a door back in place
  - fixing a door bell ringer
  - stabilising a wobbly stair rail
  - repairing a tear in clothes or upholstery
  - removing common stains eg ink, wine, and coffee
4. Take an active part in two major DIY projects, indoors or outside. You could:
  - prepare and paint, paper or tile the walls of a room
  - prepare and paint woodwork or furniture
  - fit a curtain track and hang curtains
  - make a freestanding storage unit or put up shelves
  - cover a floor with vinyl overlay, lino, tiles or carpet
  - hang a door and fit or repair locks and other door furniture
  - lay a patio, decking or path
  - build a low wall, barbecue, gate or fence
  - carry out routine service checks on a car, then clean and polish the car

Alternatively, you could do any other projects of a similar skill level. Agree what you'll do with an adult who is skilled in the relevant areas.

## GLOBAL ISSUES

This badge links to the Global Goals that people and governments all over the world are trying to achieve to make the world a better place. By doing this badge and learning about important global issues, you can explore the world around you and understand the role you can play in making it a better place.

### How to earn your badge

1. Identify where your clothing or other belongings have been made. With other Scouts, talk about why companies might choose to have the items made in other countries. What are the advantages and disadvantages of overseas production?
2. Investigate a recent natural disaster by looking at photos, news articles or videos online. Decide in small groups what five things were needed to help people after the disaster. Decide as a Troop how best you can help when a natural disaster happens.
3. Find out about an international sporting event and discuss with your Troop how sporting events can contribute to international peace and understanding.
4. In small groups, learn about an international health issue and use a creative way to share what you have learnt with your Troop. Issues could include Malaria, Ebola, HIV and Aids.
5. Think about the rights that we have in the UK (like the right to vote, the right to go to school and equal gender rights). Compare these with the rights a Scout in another country might have.

### Top tips

For number 5 you could play 'human rights musical chairs'. See the badge resource pack for more details.

[Bookbridge](#) is a charity set up by European Scouts to support young people in many different countries access education through learning centres. They have developed resources that may help you to complete this badge

## HOBBIES

If you regularly take part in a hobby and there's no specific badge for it, this is the badge you need.

### How to earn your badge

Choose one of the two options below. Complete the tasks for your chosen option to achieve this badge.

#### Option 1

1. Take up a hobby or interest that you do not already have an activity badge for.
2. Keep a record of your hobby for at least four months.

#### Option 2

1. Make a collection or study of objects for at least four months. You could collect books or magazines, films, cards, key rings, figurines or similar.
2. Talk to your Patrol Leader or your Troop about the collection or study you chose. Explain why you chose your objects and what you like about them.

### Top tips

You can earn more than one Hobbies Badge.

A hobby is an activity done regularly in leisure time for enjoyment. This could include reading.

## METEOROLOGIST

Rain or shine, wind or snow – show everyone what you know about weather.

### How to earn your badge

1. Explain how each of these are measured:
  - wind force and direction
  - cloud type and extent
  - temperature
  - pressure
  - rainfall
  - humidity.
2. Record the weather conditions every day for two weeks, or once a week for three months. Use equipment like a rain gauge or an outdoor thermometer.
3. Identify different cloud types. Describe how they are formed.
4. What do 'warm' and 'cold' air masses in summer and winter do to the typical weather in your area? Describe the effects on land and sea.
5. Explain how weather forecasts are created.
6. Show that you understand a synoptic weather map, including fronts and isobars. Explain how the measurements in step 1 relate to the map.

## INTERNATIONAL

Broaden your horizons and explore the culture and traditions of another country. The International Badge will take you on a journey and help you learn from different communities.

### How to earn your badge

1. Find out about the World Scout Movement's history and what it does today. Complete a quiz in teams to see who in your Troop knows the most about the World Scout Movement and discuss what you think World Scouting could do in the future.
2. Take part in a traditional craft or creative activity from another country.
3. In a language other than your own, introduce yourself and say a few basic, useful, everyday phrases.
4. Take part in one of these events individually or with the Troop and report back to other Scouts:
  - Jamboree On The Internet (JOTI) or Jamboree On The Air (JOTA)
  - an international camp held in the UK or abroad
  - a link to Scouts in another country

### Top tips

For number 2, traditional crafts from another country might include hieroglyphics, Chinese calligraphy, traditional tribal dress or masks, musical instruments, leatherwork, jewellery and accessories, or woodcraft.

## PARASCENDING

Experience the thrill of parascending and do what Scouts do best – take part in everyday adventure.

### How to earn your badge

1. Take part in a parascending course. Show that you can:
  - demonstrate a good landing roll
  - put on a harness and adjust it
  - assist on more than two occasions as tensiometer reader, observer or log keeper.
2. Learn the main characteristics and different types of parachutes used by parascenders.
3. Show a basic knowledge of the theory of flight.
4. Experience at least four parascending flights.

## PHOTOGRAPHER

Scouts get involved in fantastic experiences. Wouldn't it be great to be able to capture them all through photography? Work towards your Photographer badge and produce stunning snapshots.

### How to earn your badge

Choose one of these two options. Then complete all tasks for your chosen option.

#### Option 1: still photography

1. Choose one of these two activities:
  - o Produce 12 photographs, featuring at least two of these photographic techniques: portrait, still life (or similar), landscape or seascape, sport or action, or timelapse.
  - o Produce six black and white photographs, based on a theme of your choice. Explain the steps you took to create them and the impact of using black and white as an alternative to colour images. You could produce high quality prints on photographic paper or present them on screen.
2. Show that you know the main settings on a digital camera or a smartphone camera. This should include focus and exposure control, and flash settings. Explain the impact of shutter speed and aperture size on the image.
3. Describe what accessories are available to use with digital cameras or smartphone cameras.
4. Edit a selection of your images, using editing software on a computer or using an app on a smartphone. This could include cropping, colour, contrast or light levels. Explain what you have changed and how it improved your image.
5. Diagnose typical faults that happen at the photographing or editing stages, such as over or under exposure and high or low contrast. Explain how to reduce camera shake and how to respond to subject movement.
6. Show that you know how to care for a digital camera or smartphone camera.

#### Option 2: video photography

1. Produce at least two short films from two of these categories.
  - o documentary
  - o music video
  - o drama
  - o comedy
  - o advertisement
  - o training film

Create a storyboard and script for each of these. Edit the film using editing software on a computer or a smartphone app.

2. Show that you understand:
  - o camera techniques such as panning, zooming, close-ups, long shots and using additional lighting.
  - o production techniques such as editing, how to avoid jump cuts and maintaining continuity.
3. Choose one of these two activities:
  - o Show that you know how to care for a video camera and accessories, such as storage media, batteries, microphones and lights.
  - o Discuss the differences between recording video on a video camera, digital camera and a smartphone.

## PULLING (FIXED SEAT ROWING)

Take up your oars and cut through the water as you work towards this badge.

### How to earn your badge

If you have completed the British Rowing Explore Rowing Programme in a fixed seat craft, or gained a personal or leadership activity permit for pulling, you can automatically gain this badge.

If not, here's what you need to do:

1. Show that you understand the equipment required for the activity. As part of this:
  - o point out and name the basic parts of a pulling boat
  - o explain the importance of wearing appropriate clothing for various weather conditions
2. Show that you can take part in this activity safely. You should:
  - o understand how to safely enter and exit the boat
  - o understand the safety equipment required and how to use it
  - o gain a basic knowledge of the rules of the road for your local waters
  - o understand the difference between a lifejacket and a buoyancy aid, and demonstrate how to wear them correctly
  - o from a boat, heave an unweighted line to land within reach of target five metres, within three attempts
  - o learn the actions and safety requirements to take when being towed
  - o know how to respond in an emergency
3. Carry out these manoeuvres in sequence:
  - o take the boat away from a bank side mooring
  - o row in a straight line for 100 metres
  - o complete a figure-of-eight course
  - o come alongside in your dinghy, to moor at a ring, post, bollard or buoy, using a round turn and two half hitches
4. Complete two of these tasks:
  - o scull over the stern between two points, 20 metres apart, and turn through 180 degrees
  - o draw stroke over the bow
  - o take a place as an oarsman, including stroke
  - o give boat orders effectively, or listen to boat orders and act on them
  - o as bowman, be a lookout and report hazards to the coxswain using standard maritime directions, such as starboard, port quarter and dead ahead

## FARMING (PREVIOUSLY SMALLHOLDER)

When you know how to work the land and grow your own, you can learn to be really self-reliant. Grab your wellies and start producing your own food and other supplies.

### How to earn your badge

Choose one of the three options below. Complete the tasks for your chosen option to achieve this badge.

#### Option 1

1. Learn about farming practices in your area.
2. Find out about the organisation, as well as the daily and seasonal operations, of a farm of your choice. Make a note of practices relating to livestock, crops, cultivation, rotation, machinery and labour force.
3. Find photos to demonstrate the changes in farming practices that have taken place over a number of years. Explain the reasons for these.

#### Option 2

1. Cultivate an area of garden or an allotment for a specific length of time. Agree this beforehand with your leadership team.
2. Show you're successful in growing:
  - three kinds of hardy annual flower
  - three kinds of vegetable
  - two kinds of bulbs, herbaceous plants, flowering shrubs or roses.
3. Keep a record of the work you've done and the results you achieved. This could include height records of the flowers, for example.

#### Option 3

Keep any kind of livestock for at least three months. You could:

- look after farm animals or birds, and learn how they should be housed, fed and bred as well as their economic uses. Show how to handle them safely and learn about animal welfare.
- Manage a hive. Bring in some of the honey you produce.

**! An experienced adult will need to oversee the activities.**

## STREET SPORTS

Take up the challenge in an area that's gaining worldwide recognition. You can easily practice and master a street sport in the urban landscape and at your local, free skate parks.

### How to earn your badge

1. Take part in a street sport like skateboarding, roller or in-line skating, Parkour or another street sport agreed by your leadership team.
2. Own or use equipment for a street sport.. Show you can check, adjust and repair the equipment to ensure safe use.
3. Explain how to care for the equipment used and explain what you should look out for when equipment is nearing the end of its life.
4. Show that you're skilled in your chosen street sport and show how you've improved over three months. You could take part in an exhibition, public event or competition.
5. Explain the safety rules for your chosen sport including where to undertake street sports safely and responsibly.

## SNOWSPORTS

This badge is being discontinued, due to the introduction of a new Snowsports Staged Activity Badge for Beavers, Cubs, Scouts and Explorers.

This badge will no longer be available from 31 January 2019.

## SNOWSPORTS (NEW)

### Snowsports - stage 1

#### How to earn your badge

1. Identify different types of snowsports.
2. Name three places you could safely take part in snowsport activities.
3. Take part in a warm up activity to prepare you for a snowsport activity such as skiing or snowboarding. This should be an appropriate warm up for your upper, middle and lower body.
4. Dress properly for your chosen activity. Show you know the importance of helmets and how to put one on correctly.
5. Take part in a taster session that covers:
  - naming equipment used
  - how to get in and out of your skis or snowboard
  - balancing on your skis or snowboard
  - moving around on your skis or snowboard; including moving in a straight line, controlling your speed and stopping.

#### Top tips

You can do most of these steps without actually taking part in a snowsport activity on either a natural or artificial slope. But we think it's best to do them as part of a practical activity.

Your leader should be able to find lots of support on the National Governing Body websites for Snowsport England, Snowsport Scotland and Snowsport Cymru Wales.

More support for disability snowsports can be found on the Disability Snowsport UK website.

### Snowsports - stage 2

#### How to earn your badge

Before you attempt Stage 2, you need to have completed all the steps for Snowsports Stage 1. You then need to complete all the steps outlined below.

1. Identify the equipment you require and know how to carry it safely.
2. Climb and then ski or snowboard down a short run, or go on a short cross country ski.
3. Show you can make wide and narrow turns.
4. Show you can stop and wait safely on a run avoiding other users of the slope, or stop safely if doing cross country skiing.
5. Demonstrate how to safely use a drag lift or magic carpet for downhill skiing or snowboarding.
6. Know how to safely fall and get back up onto your feet.

#### Top tips

You can do most of these steps on either a natural or artificial slope. This badge can be completed doing cross country skiing as the activity, in which case element 5 should be replaced with the ability to identify a suitable route.

Your leader should be able to find lots of support on the National Governing Body websites for Snowsport England, Snowsport Scotland and Snowsport Cymru Wales.

More support for disability snowsports can be found on the Disability Snowsport UK website.

### Snowsports - stage 3

#### How to earn your badge

Before you attempt Stage 3, you need to have completed all the steps for Snowsports Stage 2. You then need to complete the following:

1. Identify hazards of the mountain environment.
2. Show you understand what to do in the event of an accident.
3. Show you know and understand the 'Ski Way Code' published by the International Ski Federation (The F.I.S.)
4. Understand the effects of extreme temperature in cases of frostbite, hypothermia, sunstroke, heat exhaustion and dehydration. Explain how they are avoided and treated.
5. Choose and complete two of the following:
  - Demonstrate a sequence of 10 linked turns
  - Complete a free run down a moderate to hard slope (red) showing balance, control, good choice of line and awareness of other people on the slope
  - Complete a 3km cross country ski route on a prepared track
  - Complete a 500m cross country ski route on varied terrain

If you have achieved The Scout Association Personal Activity Permit for Snowsports, you can automatically gain this badge.

The safety rules in chapter nine of Policy Organisation and Rules and the Adventurous Activity Permit Scheme apply when you're attempting this badge.

### Snowsports - stage 4

#### How to earn your badge

Before you attempt Stage 4, you need to have completed all the requirements to gain Snowsports Stage 3 in your chosen discipline.

You then need to complete the following:

1. Show you understand what equipment to carry for the different two types of activity you may undertake (a single lesson, day on the hill, expedition in the woods, off-piste experience, session at a snow park)
2. Show how to look after yourself and others in the event of not being able to return down the mountain, or being stranded on a route
3. Show your ability to use a ski map or resort map and identify where you are on the map
4. Plan a half days activity, considering location, group, equipment and abilities, this should include a plan B in case of bad weather, etc.
5. Participate in a snowsport activity different from that which the other requirements have been completed in, this could be something completely new or an activity you've not done for a while such as skiing, snowboarding, cross country skiing, ski touring and slalom
6. Choose and complete two of the following:
  - Demonstrate your ability to safely descend a black run
  - Perform a sequence of turns in fresh snow, leaving even tracks behind
  - Complete a day's cross country ski trip, planning your route before you go
  - Complete a cross country timed route and then improve your time over a two further attempts

You can do this stage by taking part in a snowsport activity on either a natural or artificial slope. But it is encouraged to experience both environments as part of this badge.

## WORLD CHALLENGE AWARD

### How to earn your award

1. Choose an aspect of local community life and find out as much as you can about it. You could learn about:
  - local government
  - local history
  - different faiths and beliefs
  - types of farming/industry found locally
2. Spend a day volunteering with and finding out about a service in your local community:
  - What are their challenges?
  - Who relies on this service?
  - What positive impact could you have on this service in the future?

Services could be homeless shelters, local nature reserves, care homes and food banks.
3. Take part in an activity that reflects upon and explores your own beliefs, attitudes and values (this may or may not include religious beliefs). What values do we share as Scouts? Which Scout value means the most to you?
4. Take part in an activity that explores common beliefs and attitudes towards gender or disability in different societies. You could look at this in the context of music, sport and fashion.
5. Take an active part in an environmental project.
6. Investigate and try to make contact with Scouts in another country. Make sure you and your leader read the International Links Guidance here: [www.scouts.org.uk/intlinks](http://www.scouts.org.uk/intlinks).
7. Take part in an activity that explores an international issue.