



EduTrend Contents

W4C · ADVENTURE AND OUTDOOR SPORTS · HIGH SCHOOL

Expedition Planning

Plan a safe, low-impact expedition route

Ages 15–18

Level: Advanced

75 minutes

Teams of 4–6

Activity 05

Inside: activity at a glance · step-by-step session plan · facilitator notes · 3 student worksheets · assessment checklist

ACTIVITY 05 · AT A GLANCE

Expedition Planning

Teams plan a day expedition in a real or fictional area. They write a route card with grid references, bearings, distances and timings using Naismith's rule, build a kit list, complete a risk assessment with escape routes, and write a leave no trace plan.

Learning outcomes

By the end of the session students can:

- plan a route with bearings, distances and timings;
- apply Naismith's rule to estimate times;
- complete a risk assessment with controls;
- apply leave no trace principles.

KEY WORDS

route card · grid reference · bearing · Naismith's rule · escape route · risk assessment · kit list · leave no trace

CURRICULUM LINKS

Geography: map skills and environment. Maths: calculations and estimation. PE: outdoor and adventurous activities.

1

PREPARE

Kit, plan, safety

2

LEARN

Skill or idea

3

EXPLORE

Try it outdoors

4

CHALLENGE

Solve a task

5

REFLECT

What did we learn?

6

RESPECT

Leave no trace

Materials (per team)

- Topographic maps of a chosen area
- Baseplate compasses and romers or rulers
- Route card, kit list and risk assessment templates
- Weather forecast examples
- Worksheets 1, 2 and 3

Before the session

- Choose an area and print maps.
- Prepare templates.
- Collect example forecasts.
- Plan a practical walk to test a leg if possible.

SAFETY

A real expedition needs qualified leaders, consent and emergency plans. Check forecasts; turn back if conditions worsen.

ACTIVITY 05 · SESSION PLAN

Step by step

Insist on an escape route for every leg: it turns risk assessment from paperwork into real decision-making.

Time	What happens	Say or ask
0–10 min Hook	Show a real incident report where planning helped.	<i>"What made the difference?"</i>
10–25 min Route card	Teams plot legs with grid references, bearings and distances.	<i>"How long will each leg take?"</i>
25–40 min Timings	Apply Naismith's rule and add rest time.	<i>"Where is the steepest ascent?"</i>
40–60 min Risk and kit	Complete risk assessment, escape routes and kit list.	<i>"What if the weather changes?"</i>
60–75 min Present	Teams present plans; peers challenge.	<i>"Is the plan safe and low-impact?"</i>

CHALLENGE CARD (print or copy onto the board)

Produce a complete day expedition plan with a route card, Naismith timings, kit list, risk assessment with escape routes and a leave no trace plan.

ACTIVITY 05 · FACILITATOR NOTES

The outdoor know-how in brief

A route card breaks a journey into legs, each with start and end grid references, bearing, distance, height gain and estimated time. Naismith's rule estimates walking time as 1 hour for every 5 kilometres plus 1 hour for every 600 metres of ascent; teams adjust for fitness, loads and terrain.

Risk assessment identifies hazards, estimates likelihood and severity, and plans controls such as escape routes and turnaround times. The seven Leave No Trace principles are: plan ahead and prepare; travel and camp on durable surfaces; dispose of waste properly; leave what you find; minimise campfire impacts; respect wildlife; and be considerate of others.

Common ideas to listen for

- "Naismith's rule is exact." It is an estimate to adjust.
- "A risk assessment removes all risk." It manages risk to acceptable levels.
- "Leave no trace just means picking up litter." It covers route choice, wildlife and other visitors too.

Adapting the activity

Support

Use a pre-drawn route and calculate timings only.

Stretch

Plan an alternative bad-weather route and compare risks.

WORKSHEET 1

Route card

Name: _____

Class: _____ Date: _____

Complete your route card.

Legs

Leg	From-to (grid ref)	Bearing	Distance	Ascent	Time
1					
2					
3					
4					

WORKSHEET 2

Risk assessment

Identify hazards and controls.

Risks

Hazard	Likelihood	Severity	Control
1			
2			
3			
4			

WORKSHEET 3

Kit and leave no trace

Plan kit and impact.

Essential kit

Our leave no trace plan

FOR THE TEACHER

Assessment checklist

Use during the session. One sheet covers up to eight students; copy as needed.

Student	Plans an accurate route	Manages risk	Applies leave no trace

Suggested codes: W = working towards · E = expected · G = greater depth

ABOUT THIS ACTIVITY

Expedition Planning is a sample activity from the EduTrend Contents W4C Adventure and Outdoor Sports programme (high school, level: advanced). Every activity in the programme follows the same format: a practical challenge, a clear session plan, facilitator notes and ready-to-print worksheets, so that teachers, club leaders and parents can run it without extra preparation.

Full 15-, 20- and 32-week programmes are available from EduStore at edutrend.org.

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