NAVIGATION TECHNIQUES

QUESTIONS

In these questions the prefix 'GR' stands for Grid Reference and does not correspond to the two-letter map prefix
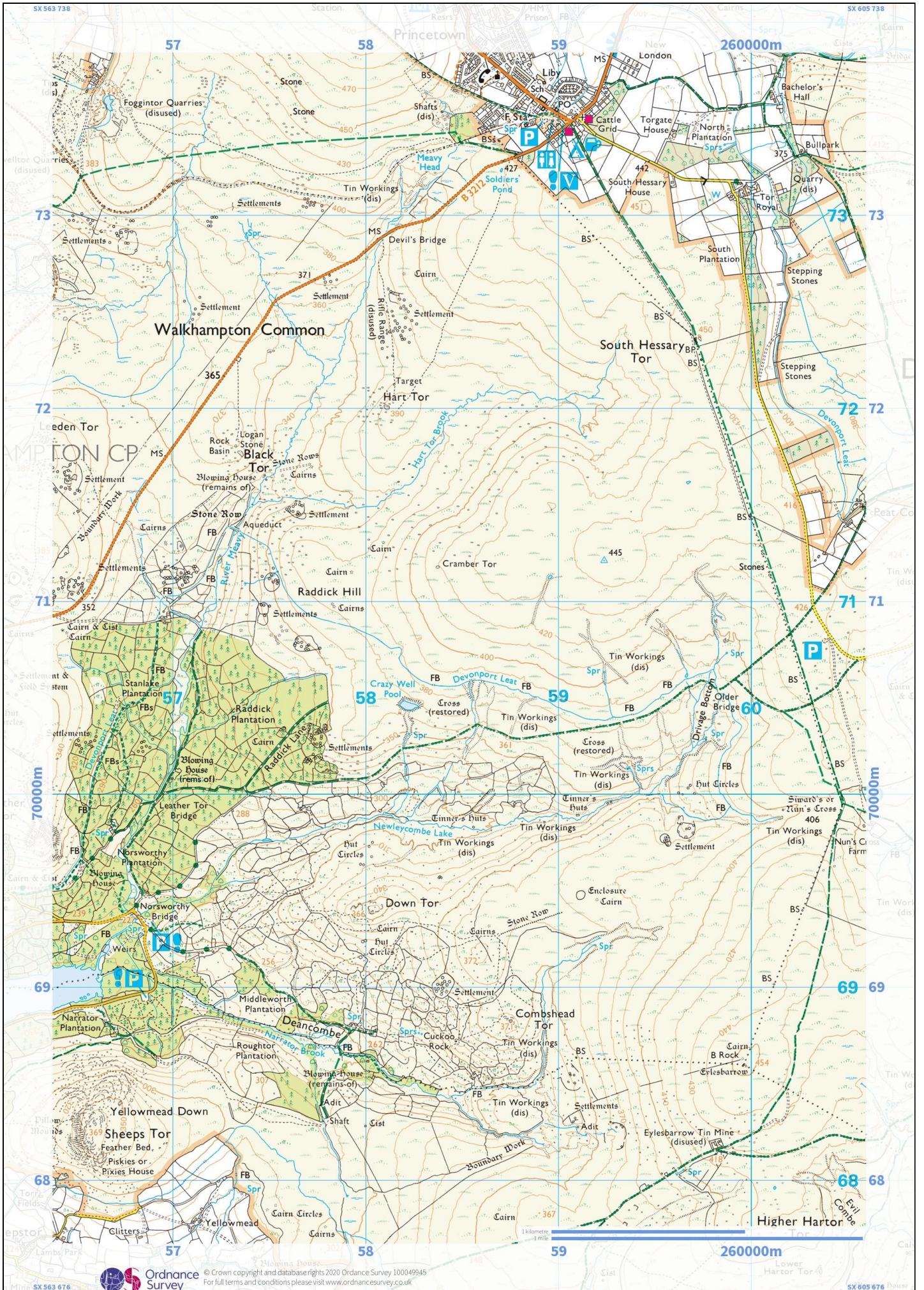
Here is the complete question sheet for my **NAVIGATION TECHNIQUES** series. The maps you will require are attached to the beginning of the questions. You will need to ensure these maps are printed to scale. Check your printer settings and maybe run a test print on one of the map pages to save ink and paper! **As a reference, one grid square should measure 4cm x 4cm (40mm x 40mm)**

The complete answer sheet is attached to Series 3 in my Online Navigation Course: **CONTOURS**

To put these skills into practice and to learn more, take a look at my Navigation Courses I offer.

All **confirmed bookings** will receive a **10% discount** code to use on **Harvey Maps** products from their site.

57
58
59
260000m

74

Princetown

New London

HM Prison

Foggintor Quarries (disused)

Stone
Stone
Stone

Station

Liby
Sch
PO

Cattle Grid

Torgate House

North Plantation

Bachelor's Hall

MS

Shafts (dis)

F Sta

BS

BSs

P

427

Soldiers' Pond

Meavy Head

South Hessary House

442

375

Bullpark

Tor Royal

Quarry (dis)

Swelltor Quarries (disused)

383

Tin Workings (dis)

B 3212

Settlements

400

470
450
430

451

South Plantation

W

73
73
73

MS

Devil's Bridge

Walkhampton Common

380

371

Cairn

Settlement
360

Rifle Range (disused)

Settlement

BS

450

South Hessary Tor

BP
BS

Stepping Stones

Stepping Stones

Leeden Tor

AMPTON CP

MS

Rock Basin

Logan Stone

Black Tor

Stone Rows

Cairns

Target

Hart Tor

390

Hart Tor Brook

Devonport Leat

72
72
72

Blowing House (remains of)

Stone Row

Aqueduct

FB

Settlement

River Meavy

Cairns

Settlements

Boundary Work

FB

352

Settlement

Cairns

Settlements

FB

Raddick Hill

Cairn

Cairns

Cairn

Cramber Tor

445

Stones

416

426

BSs

71
71
71

Cairn & Cist
Cairn

Settlement & field system

Settlements

Hut Circles

Stanlake Plantation

FBs

Devonport Leat

FBs

57

Raddick Plantation

Cairn

Raddick Lane

Settlements

Crazy Well Pool

58

Cross (restored)

Devonport Leat

FB

380

FB

Tin Workings (dis)

Spr

FB

59

FB

Older Bridge

60

Drivage Bottom

Spr

BS

P

Cairn

Blowing House (rems of)

Cairn

350

Spr

361

Cross (restored)

Tin Workings (dis)

Sprs

FB

Hut Circles

FB

BS

FBs

FB

Leather Tor Bridge

288

Spr

300

Tinner's Huts

Tinner's Huts

Settlement

Siward's or Nun's Cross

406

Tin Workings (dis)

Nun's Cross Farm

70000m
70000m

FB

FB

Newleycombe Lake

Tin Workings (dis)

Hut Circles

Norsworthy Plantation

Blowing House

340

Hut Circles

Tin Workings (dis)

Cairn & Cist

FB

239

Norsworthy Bridge

Spr

FB

P

Weirs

Down Tor

Cairn

Hut Circles

Stone Row

Cairns

Enclosure Cairn

372

Settlement

BS

Spr

BS

69
69
69

P

Middleworth Plantation

256

Settlement

Combshead Tor

371

BS

Narrator Plantation

Spr

Deancombe

Roughtor Plantation

Narrator Brook

FB

262

Sprs

Cuckoo Rock

Tin Workings (dis)

BS

Cairn

B Rock

454

Eylesbarrow

Yellowmead Down

Sheeps Tor

Feather Bed, Piskies or Pixies House

369

Blowing House (remains of)

Adit

Shaft

Cist

30

FB

Tin Workings (dis)

Adit

Settlements

Eylesbarrow Tin Mine (disused)

Higher Hartor Tor

68
68
68

Pillow Mounds

Torr Fields

FB
Spr

Cairn Circles

Yellowmead

Cairns

Cairn

367

Spr

Evil Combe

Glitters

Lambs Park

1 kilometre
1 mile

58
59
260000m

Ordnance Survey
© Crown copyright and database rights 2020 Ordnance Survey 100049945
For full terms and conditions please visit www.ordnancesurvey.co.uk

Q1: Using a romer or a distance card, how far is it from Hart Tor (GR 581,720) to Black Tor (GR 573, 717) to the nearest 100m?

………………………………..

Q2: Using a ruler, how far is it from South Hessary Tor (GR 597, 723) to the Trig Point (GR 592, 712) to the nearest 50m?

………………………………

Q3: From where the bridleway meets the road (GR 590, 734) to where the bridleway meets the end of the embankment (GR 582, 702) follow this bridleway and measure the distance to the nearest 100m.
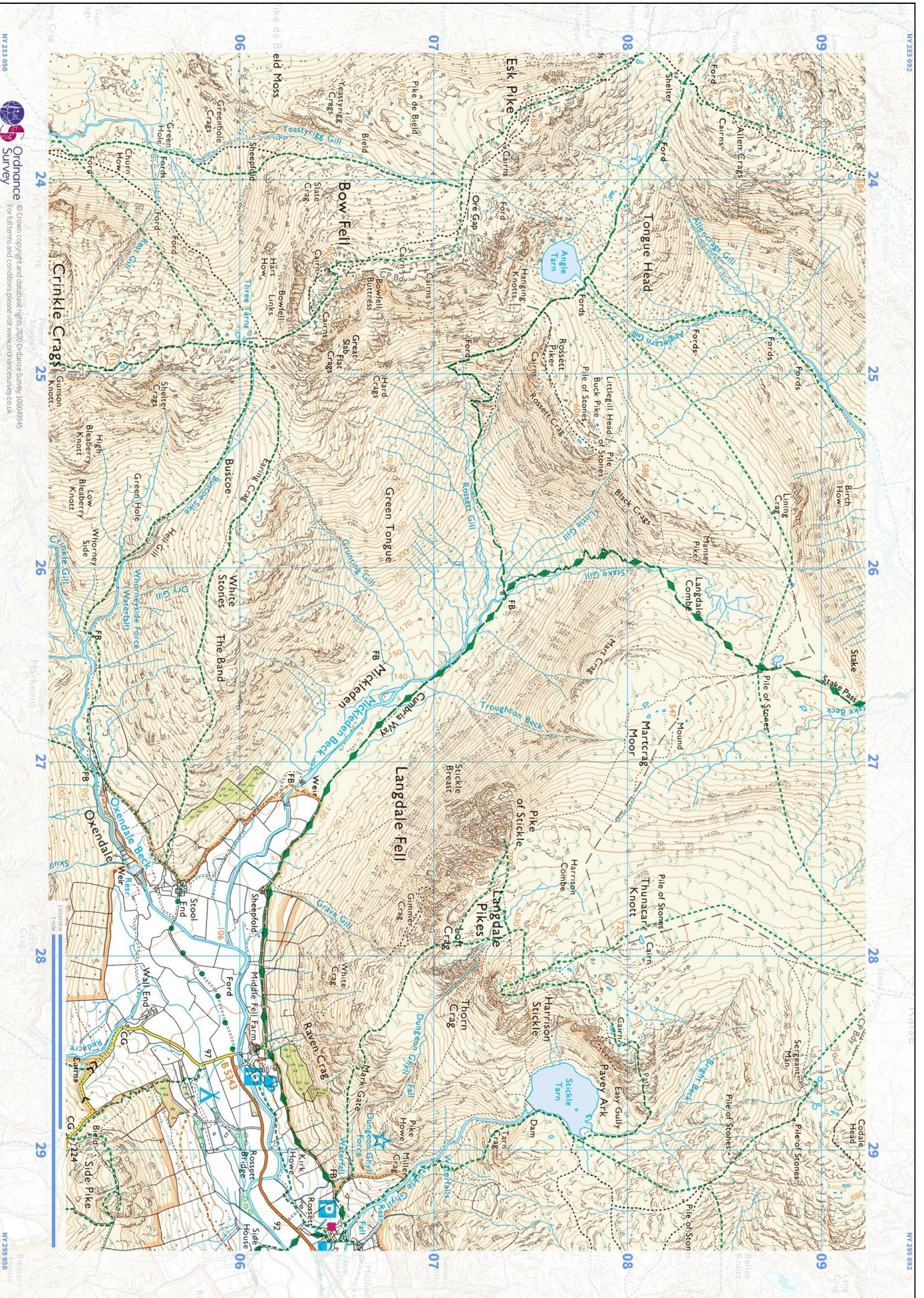
……………………………….

Q4: In straight lines measure the following distances to the nearest 25m and work out the total distance:

- **Footbridge (GR 583, 705) to Cramber Tor (583, 711)** ………………………………

- **Cramber Tor (GR 583, 711) to small pond (GR 589, 711)** …………………………….

- **Small Pond (GR 589, 711) to Small Pond (GR 596, 716)** ………………………..

- **TOTAL DISTANCE:** …………………………………………………

Q5: Using any way to measure distances, measure the following distances to the nearest 25m and work out the total distance:

- **Where the bridleway meets the road (GR 590, 734) to where the footpath meets the road (GR 580, 728)**

  ……………………………..
- **Where the footpath meets the road (GR 580, 728) to Hart Tor (GR 581, 720)**

  ……………………………..

- **From Hart Tor (GR 581, 720) to the Trig Point (GR 592, 712)** ………………………………………..

- **TOTAL DISTANCE:** …………………………………………

NY 233 050
NY 233 092
NY 295 050
NY 295 092

Esk Pike
Tongue Head
Bow Fell
Crinkle Crags
Angle Tarn
Allen Crags
Hanging Knotts
Ore Gap
Three Tarns
Bowfell Buttress
Great Slab
Hart How
Slate Crag
Yeastyrigg Crags
Yeastyrigg Gill
Pike de Bield
Bield
Churn How
Greenhole Crags
Green Hole
Sheepfold
Shelter Crags
Gunson Knott
High Bleaberry Knott
Low Bleaberry Knott
Whorney Side
Green Hole
Buscoe
White Stones
The Band
Hell Gill
Crinkle Gill
Whorneyside Force (Waterfall)
Dry Gill
Earing Crag
Green Tongue
Hard Crags
Rossett Crag
Rossett Pike
Buck Pike
Littlegill Head
Pile of Stones
Black Crags
Lining Crag
Birch How
Mansey Pikes
Langdale Combe
Stake Pass
Stake Beck
Pile of Stones
Rossett Gill
Stake Gill
Mar Crag
Langdale Fell
Mickleden
Cumbria Way
Troughton Beck
Martcrag Moor
Mound
Stickle Breast
Pike o' Stickle
Harrison Combe
Thunacar Knott
Loft Crag
Gimmer Crag
Langdale Pikes
Thorn Crag
Harrison Stickle
Pavey Ark
Easy Gully
Sergeant Man
Codale Head
Pile of Stones
Oxendale
Oxendale Beck
Stool End
Sheepfold
Middle Fell Farm
Raven Crag
Gt Knott
Ford
Wall End
Stickle Tarn
Dam
Mark Gate
Pike Howe
Tarn Crag
Dungeon Ghyll Force (Waterfall)
Mill Gill
Stickle Ghyll
Rossett Bridge
Side Pike
Bield
Side House
Kirk Howe
Dungeon Ghyll
B 5343

Q6: You are walking along the Cumbria way. It is a good, flat footpath and you are averaging 4kmh. You have just crossed the footbridge at GR 261, 073 heading SE. It is now 21:00 in the evening and last orders at the Old Dungeon Ghyll bar (GR 285, 061) is called at 22:00. Will you get to the bar in time?
- **Work out distance to the nearest 100m**
- **Work out time to the nearest minute**

………..

Q7: You left Three Tarns (GR 248, 060) at 14:15 in the afternoon and are descending the footpath down 'The Band' to the East. You are walking at 3kmh and it is now 14:49. Roughly where are you on The Band?
- **Within 10% allowance either way (Time and Distance)**

………..

Q8: The distance from the footbridge (GR 261, 073) to the small Tarn (GR 264, 087) is 1.9km. Walking at 2kmh, how long will it take you to walk there?
- **Consider Naismith's rule**
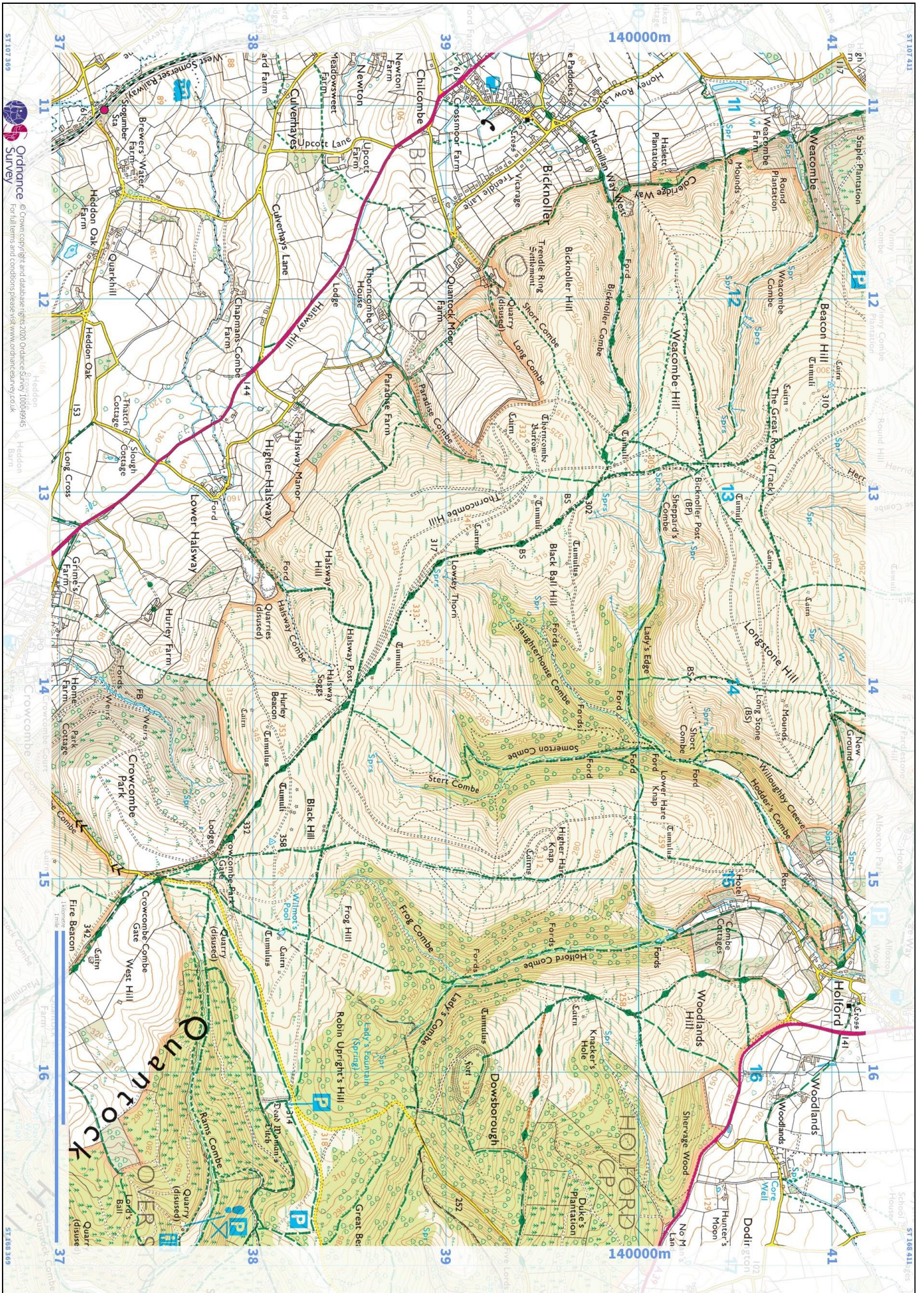- **Within 10% allowance (Time)**

………

Q9: No map needed for this Question: You are planning a brisk circular walk for the morning but have to be home by midday. You plan to walk at 5kmh. If you were to leave at 09:30, how far can you plan to walk?

………..

Q10: No map needed for this Question: I have planned a walk which is 9.6km long with height gained of 340 metres. If I average 4kmh, how long will this walk take (assuming I take no breaks)?

………

Q11: What is the bearing from the southern end of Wilmot's Pool (GR 152, 381) to the Trig point (GR 148, 381)

…………………………………………..

Q12: I have reached the track junctions at GR 128, 398 and I am unsure which track to take. I have taken a bearing on my map down the path I want to use. The bearing is 338 degrees. Which track will I take? (Highlight on you map)

Q13: I am walking up Bicknoller Combe. I am in grid square 12, 39 and have checked the direction of the path using a magnetic bearing to see where I am on the track. My bearing is 59 degrees. Roughly where am I? (Highlight on your map)

Q14: I am stood at the Tumuli at GR 131, 405. I have spotted my next checkpoint through a break in the clouds. I took a sight bearing and it was 309 degrees. What feature did I see?
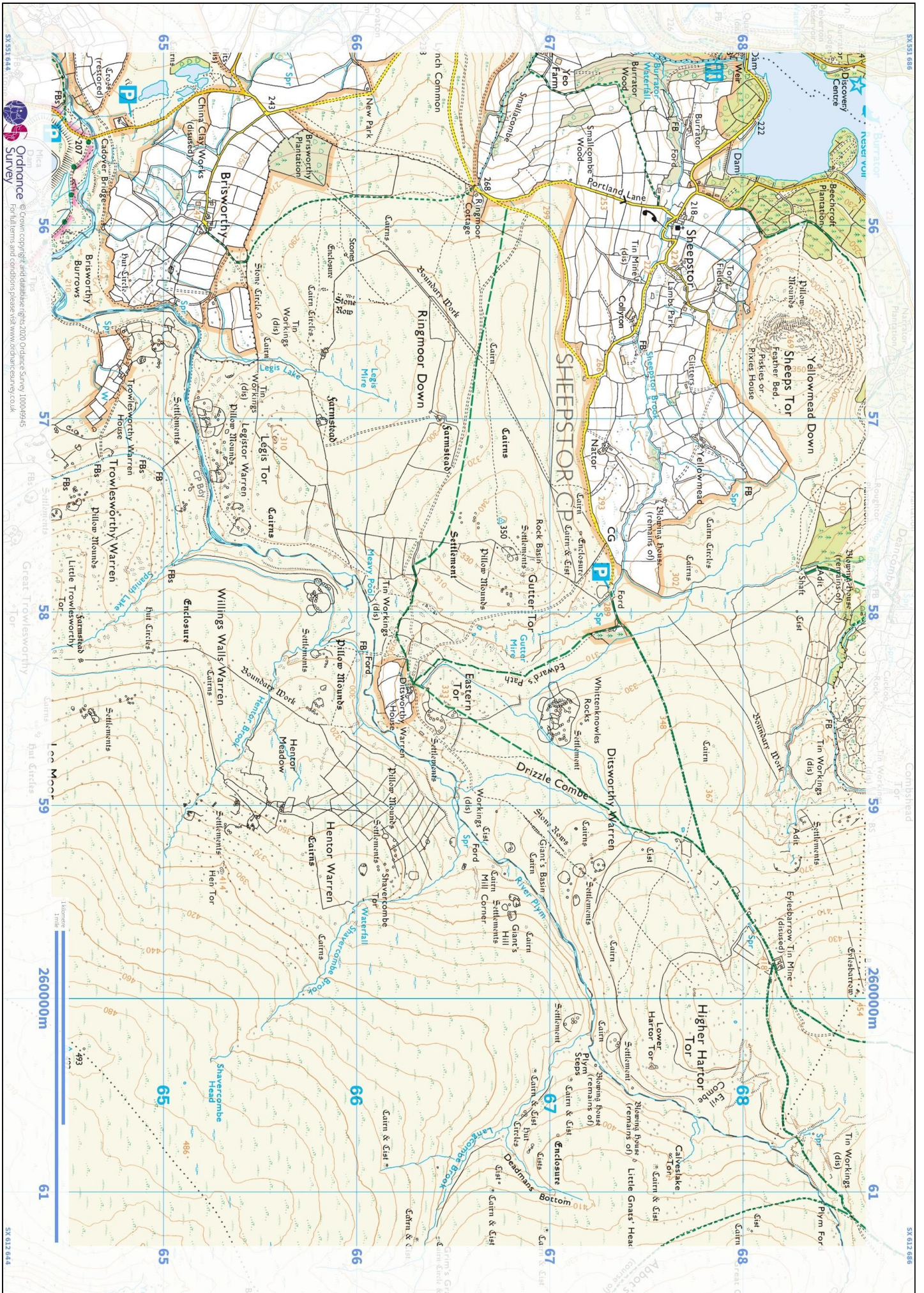
………………………………………………………………

Q15: What is the bearing from the Tumulus at GR 147, 401 to Higher Knap at GR 148,395?

………………………………………………………………

Q16: Check the direction of the handrail from GR 132, 379 to GR 135, 381

………………………………………………………………

SX 551 644

SX 551 686

SX 612 686

SX 612 644

Reservoir

Burrator

Discovery Centre

Dam

Weir

Burrator Reservoir

Beechcroft Plantation

Burrator Waterfall

Burrator Wood

Smallacombe Wood

Yeo Farm

Portland Lane

Sheepstor

Collycon

Nattor

Tin Mine (dis)

Lambs Park

Torr Fields

Yellowmead

Sheepstor Brook

Sheeps Tor

Yellowmead Down

Feather Bed, Pixies or Pixies House

Pillow Mounds

Blowing house (remains of)

Cairn Circles

SHEEPSTOR CP

Ringmoor Cottage

New Park

Lynch Common

Brisworthy Plantation

China Clay Works (disused)

Cadover Bridge

Brisworthy Burrows

Cross (restored)

Brisworthy

Stone Circle

Stone Row

Stones

Cairns

Enclosure

Cairn Circles

Tin Workings (dis)

Ringmoor Down

Boundary Work

Legis Lake

Legis Mire

Legis Tor

Legistor Warren

Trowlesworthy Warren House

Trowlesworthy Warren

Little Trowlesworthy Tor

Great Trowlesworthy Tor

Spanish Lake

Settlements

Pillow Mounds

Hut Circles

Willings Walls Warren

Enclosure

Boundary Work

Hentor Brook

Hentor Meadow

Pillow Mounds

Hentor Warren

Hen Tor

Shavercombe Brook

Shavercombe Head

Shavercombe Waterfall

Settlements

Cairns

Pillow Mounds

Ditsworth House

Ditsworthy Warren

Eastern Tor

Edward's Path

Gutter Tor

Guttor Mire

Maxy Pool

Rock Basin

Settlements

Cairn & Cist

Enclosure

Drizzle Combe

River Plym

Giant's Basin

Giant's Hill

Mill Corner

Stone Rows

Cairns

Settlements

Whittenknowles Rocks

Ditsworthy Warren

Combshead Tor

Langcombe Brook

Higher Hartor Tor

Lower Hartor Tor

Eylesbarrow Tin Mine (disused)

Eylesbarrow

Blowing house (remains of)

Little Gnats Head

Plym Ford

Calveslake Tor

Deadmans Bottom

Plym (remains of) Steps

Cairn & Cist

Hut Circles

Enclosure

Settlement

Cairn

Shaft

Adit

Tin Workings (dis)

Deancombe

Narrator Plantation

Cist

Cairn

260000m

Q17: From Ditsworthy Warren House (GR 584, 662) you want to head to the Trig Point on Gutter Tor (GR 575, 667). The visibility is poor. Using what you know about attack points, describe how would get to the Trig Point and how long it is going to take. You are walking at 3kmh.

....

....

....

....

Q18: From the parking (GR 579, 673) you want to head to Lower Hartor Tor (GR 603, 675). It is night but you can manage to average 4kmh. Describe what you think is the best route to get to the Tor and why. How long will it take you?

....

....

....

....

Q19: From the enclosure (GR 581, 651), what technique or techniques would you use to find the footbridge (GR 577, 650)?

....

....

....

....

Q20: From Hen Tor (GR 593, 653), describe how you would navigate to the Settlement (GR 593, 660)

....

....

....

....

Q21: From Hen Tor (GR 593, 653), how far and how long will it take you, walking at 3kmh, to get to the small pond (GR 604,651) and on what bearing?

....

Q22: From where the Stone Row meets the Boundary (GR 563, 659), you set a bearing to head to the Trig Point (GR 575, 667). The visibility is poor, and you think you may have wandered off your bearing. You come across a boundary and check the direction it is running in. It is running along a bearing of 87 degrees. Which boundary are you on? (Highlight on your map)

Q23: You are walking at 3kmh, following the Leat in grid square 57, 64 and 57,65 You are heading for the footbridge (GR 577, 650) and want to know how long it is going to take you to get there. You are stood by another footbridge, but which one? *(highlight footbridge on your map)*

- **You passed a footbridge 2 minutes ago**
- **The aspect of slope from your position is 322 degrees**

……….