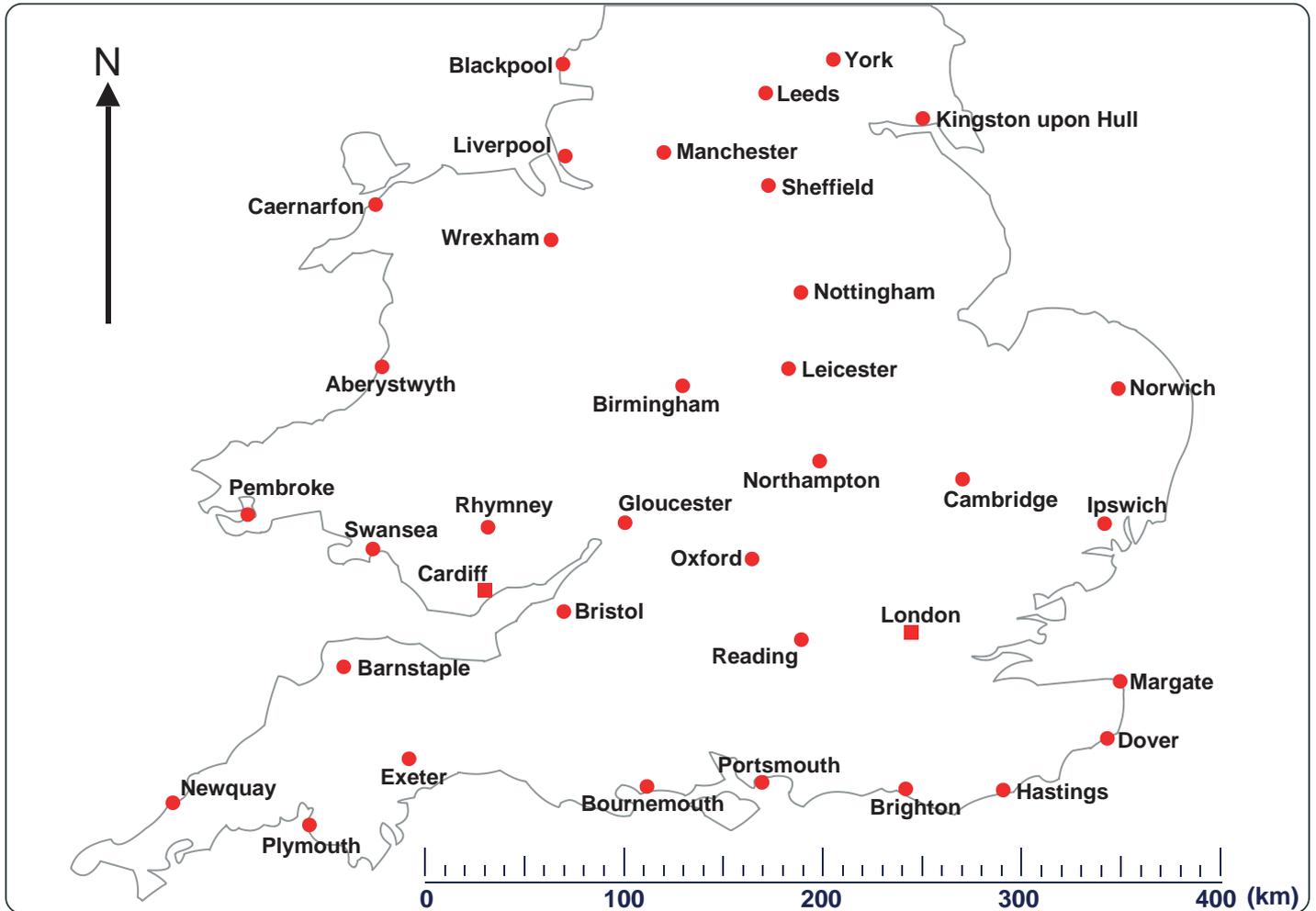


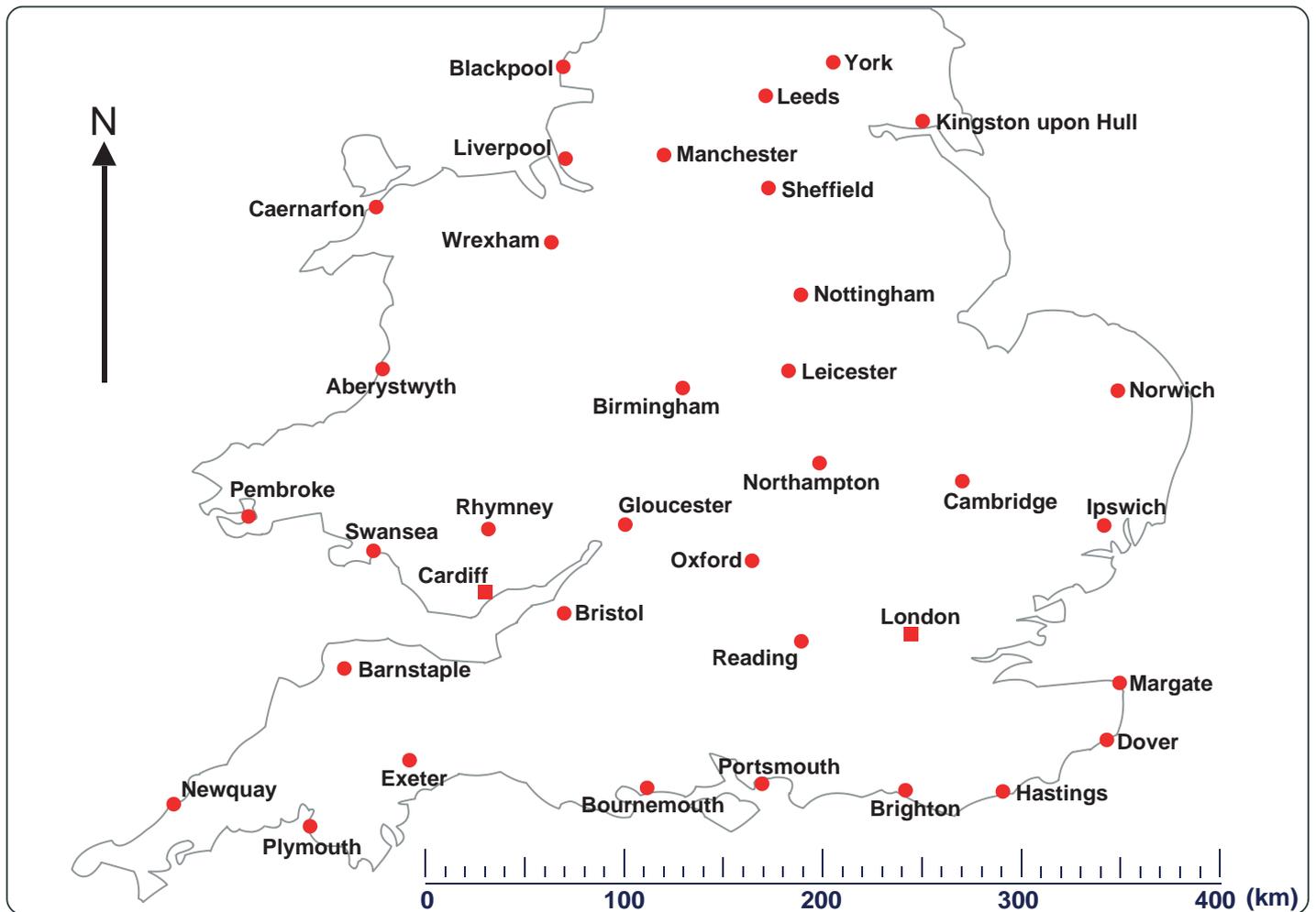
Bearings: maps and scale drawings

You will need a protractor, a rule and a sharp pencil for this exercise.



- 1 An airplane leaving Aberystwyth must fly on which bearing to travel to Wrexham?
- 2 An airplane leaving Blackpool on a bearing of 089° will pass over which city?
- 3 An airplane leaving Bournemouth must fly on which bearing to travel to Brighton?
- 4 An airplane leaving Norwich on a bearing 180° flies over which seaside town?
- 5 An airplane leaving Manchester must fly on which bearing to travel to Cambridge?
- 6 If you leave Newquay on a bearing of 014° should you hire a car or a boat? Which town do you arrive at first?
- 7 Exeter is on a bearing of _____ from Northampton?
- 8 Swansea is on a bearing of _____ from Bournemouth?
- 9 Oxford is on a bearing of _____ from Portsmouth?
- 10 Caernarfon is on a bearing of _____ from Barnstaple?
- 11 An airplane leaves Rhymney airport and flies on a bearing of 053° . Which two cities will the plane fly over?
- 12 An airplane leaves London and flies on a bearing of 342° . Which two cities will the plane fly over?
- 13 An airplane leaves Leeds and flies on a bearing of 176° . Which three cities will the plane fly over? You'll need to be very accurate with your measurements to get this right!
- 14 Ipswich is on a bearing of 000° from Dover. What is the bearing of Dover from Ipswich?
- 15 Leicester is on a bearing of 090° from Aberystwyth. What is the bearing of Aberystwyth from Leicester?
- 16 Newquay is on a bearing of 280° from Plymouth. What is the bearing of Plymouth from Newquay?

Bearings: maps and scale drawings



Problems involving scale:

- 17 'As the crow flies' how far is Swansea from Sheffield ?
- 18 A light airplane has enough fuel to travel 200 km when it leaves Cardiff airport. Will it get to London?
- 19 You are on Rhymney mountain with a microlight that has a range of 100 km. List all the towns marked on the map above that you could visit.
- 20 If you leave London on a bearing of 343° and travel for 235 km which city will you be in?
- 21 A ship is 85 km from Barnstaple on a bearing of 068° when it broadcasts a distress signal. Should you call the coast guard at Swansea or Cardiff?
- 22 You have been travelling on a bearing of 063° for 120 km when you finally reach Margate. Which town did you start off from?
- 23 You leave London on a bearing of 018° and travel for 82 km. You then travel on a bearing of 249° for 112 km. Which places have you visited?
- 24 Construct a table of bearings and distances that if followed would guide a ship from Blackpool to Swansea.

Now visit eChalk and use the "Bearings: maps and scale drawings" application to check your answers!

Bearings: maps and scale drawings

(Answers)

- 1 An airplane leaving Aberystwyth must fly on which bearing to travel to Wrexham? (053°)
- 2 An airplane leaving Blackpool on a bearing of 089° will pass over which city? (York)
- 3 An airplane leaving Bournemouth must fly on which bearing to travel to Brighton? (090°)
- 4 An airplane leaving Norwich on a bearing 180° flies over which seaside town? (Margate)
- 5 An airplane leaving Manchester must fly on which bearing to travel to Cambridge? (138°)
- 6 If you leave Newquay on a bearing of 014° should you hire a car or a boat? Which town do you arrive at first? (boat, Pembroke)
- 7 Exeter is on a bearing of _____ from Northampton? (234°)
- 8 Swansea is on a bearing of _____ from Bournemouth? (301°)
- 9 Oxford is on a bearing of _____ from Portsmouth? (357°)
- 10 Caernafon is on a bearing of _____ from Barnstaple? (004°)
- 11 An airplane leaves Rhymney airport and flies on a bearing of 053°. Which two cities will the plane fly over? (Birmingham and Nottingham)
- 12 An airplane leaves London and flies on a bearing of 342°. Which two cities will the plane fly over? (Nottingham and Sheffield)
- 13 An airplane leaves Leeds and flies on a bearing of 176°. Which three cities will the plane fly over? You'll need to be very accurate with your measurements to get this right! (Sheffield, Leicester and Reading)
- 14 Ipswich is on a bearing of 000° from Dover. What is the bearing of Dover from Ipswich ? (270°)
- 15 Leicester is on a bearing of 090° from Aberystwyth. What is the bearing of Aberystwyth from Leicester? (270°)
- 16 Newquay is on a bearing of 280° from Plymouth. What is the bearing of Plymouth from Newquay? (100°)

Problems involving scale:

- 17 'As the crow flies' how far is Swansea from Sheffield ? (272 km)
- 18 A light airplane has enough fuel to travel 200 km when it leaves Cardiff airport. Will it get to London? (No)
- 19 You are on Rhymney mountain with a microlight that has a range of 100 km. List all the towns marked on the map above that you could visit. (Aberystwyth, Swansea, Cardiff, Barnstaple, Bristol, Gloucester)
- 20 If you leave London on a bearing of 343° and travel for 235 km which city will you be in? (Sheffield)
- 21 A ship is 85 km from Barnstaple on a bearing of 068° when it broadcasts a distress signal. Should you call the coast guard at Swansea or Cardiff? (Cardiff)
- 22 You have been travelling on a bearing of 063° for 120 km when you finally reach Margate. Which town did you start off from? (Brighton)
- 23 You leave London on a bearing of 018° and travel for 82 km. You then travel on a bearing of 249° for 112 km. Which places have you visited? (Cambridge, Oxford)