Name _____ Date _____

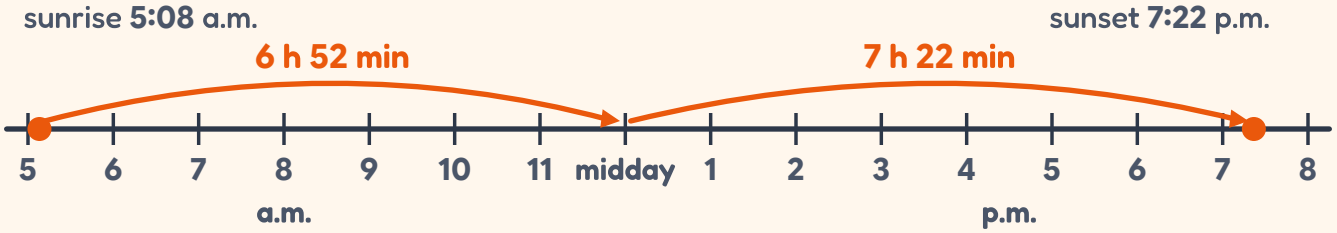


Summer Solstice Daylight

Find how long the sun is up in each city on 22 December.

Daylight is the time from sunrise to sunset.

Find the time from sunrise to midday and from midday to sunset. Then add.



Perth: **6 h 52 min + 7 h 22 min = 13 h 74 min = 14 h 14 min**

City	Sunrise	Sunset	Sunrise to midday	Midday to sunset	Daylight
Perth	**5:08** a.m.	**7:22** p.m.	**6** h **52** min	**7** h **22** min	**14** h **14** min
Darwin	**6:19** a.m.	**7:11** p.m.	___ h ___ min	___ h ___ min	___ h ___ min
Brisbane	**4:50** a.m.	**6:43** p.m.	___ h ___ min	___ h ___ min	___ h ___ min
Sydney	**5:41** a.m.	**8:06** p.m.	___ h ___ min	___ h ___ min	___ h ___ min
Hobart	**5:28** a.m.	**8:50** p.m.	___ h ___ min	___ h ___ min	___ h ___ min
Wellington	**5:44** a.m.	**8:54** p.m.	___ h ___ min	___ h ___ min	___ h ___ min

1. Which city has the longest day? _____

2. Which city has the shortest day? _____

3. How much longer is the day in Hobart than in Darwin? ___ hours ___ minutes

4. How many minutes longer is the day in Sydney than in Brisbane? ___ minutes

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Name _____ Date _____



Summer Solstice Daylight

Round each day to the nearest half hour. Then make a bar graph.

City	Daylight on 22 December	Nearest half hour
Canberra	**14** h **32** min	**14** h **30** min
Cairns	**13** h **9** min	
Alice Springs	**13** h **36** min	
Napier	**14** h **58** min	
Christchurch	**15** h **26** min	
Invercargill	**15** h **49** min	

To the nearest half hour

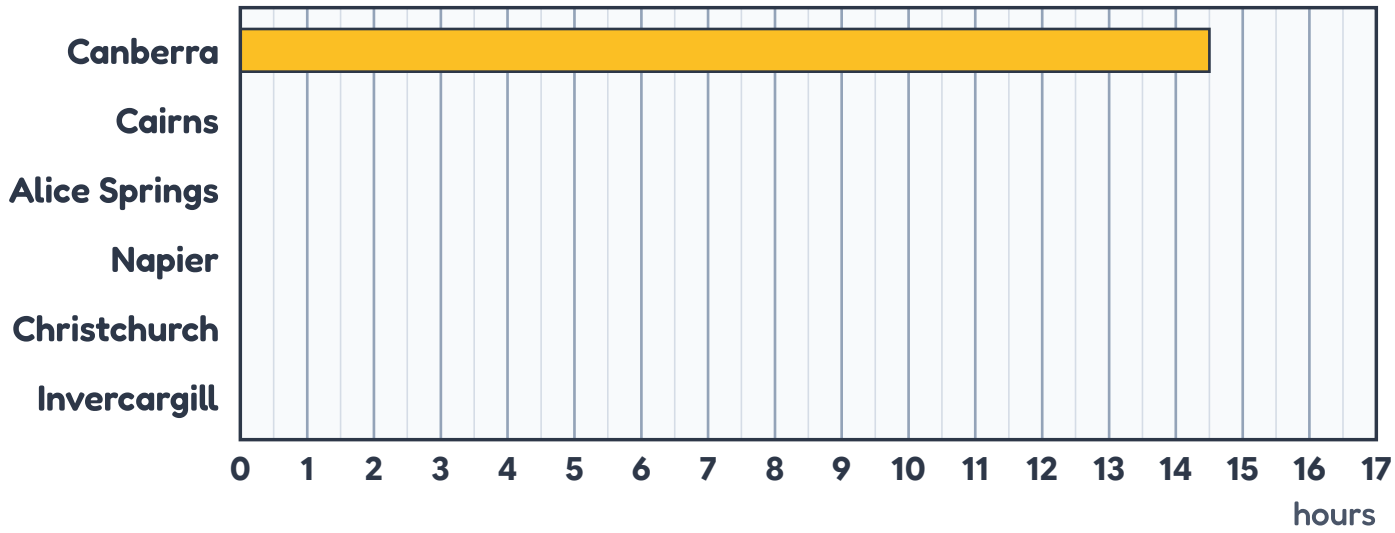
0 to 14 minutes:
round down to the hour.

15 to 44 minutes:
round to the half hour.

45 to 59 minutes:
round up to the next hour.

14 h 32 min rounds to 14 h 30 min.

Hours of daylight on 22 December



1. Which city has the most daylight? _____

2. Which city has the least daylight? _____

3. How many more hours of daylight does Invercargill have than Cairns? _____ hours

4. How many cities have more than **15** hours of daylight? _____ cities

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Name _____ Date _____

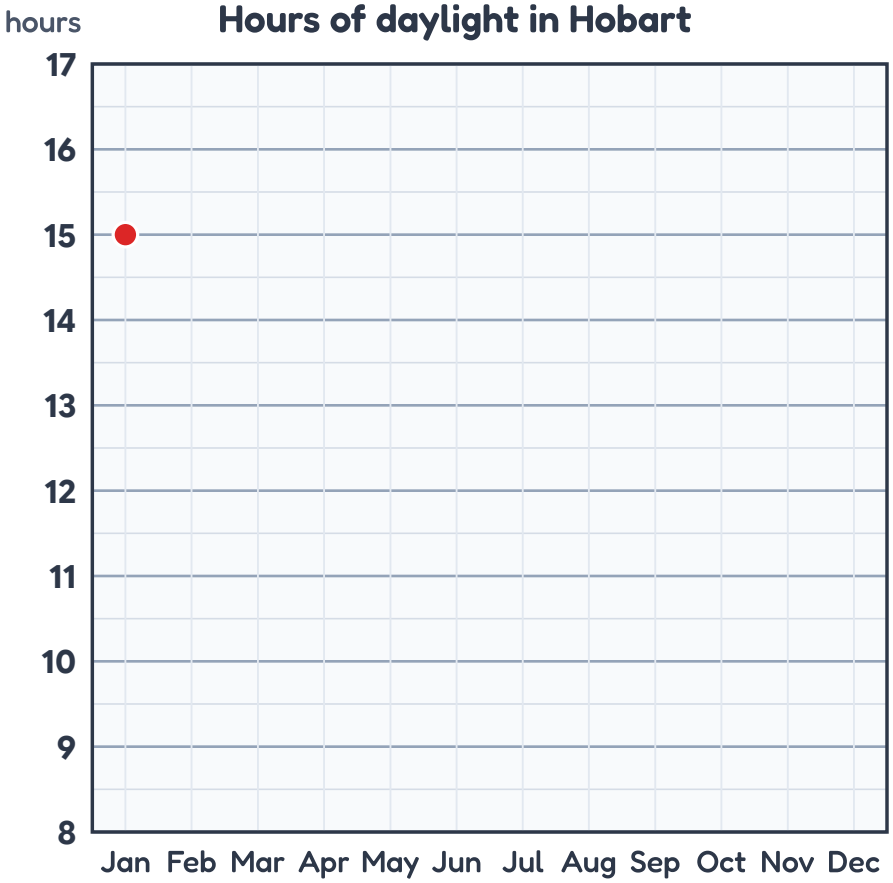


Summer Solstice Daylight

Make a line graph of a year of daylight in Hobart.

21st of	Daylight
January	**15** h
February	**13** h **30** min
March	**12** h
April	**10** h **30** min
May	**9** h **30** min
June	**9** h
July	**9** h **30** min
August	**10** h **30** min
September	**12** h
October	**13** h **30** min
November	**15** h
December	**15** h **30** min

Rounded to the nearest half hour.
January is plotted for you.



1. In which month is the day longest? _____

2. In which month is the day shortest? _____

3. How much more daylight is there in December than in June? ____ hours ____ minutes

4. Which two months have **12** hours of daylight? _____

5. How many months have more than **12** hours of daylight? ____ months

6. After which month do the days start to get longer again? _____

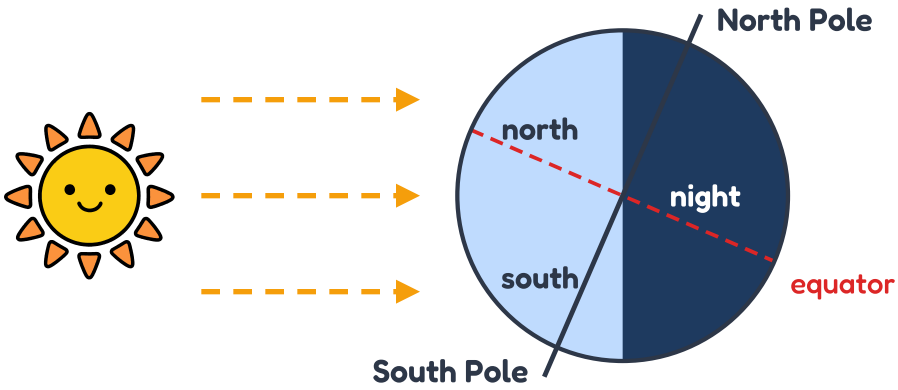
© 2026 Eggroll Games

Name _____ Date _____



Summer Solstice Daylight

The same two days in the north and in the south.



In December, the southern half of Earth leans towards the sun. Days are long: summer.

The northern half leans away from the sun. Days are short: winter.

City	Where it is	Daylight on 22 December	Daylight on 21 June
London	north	**7** h **50** min	**16** h **38** min
Singapore	near the equator	**12** h **3** min	**12** h **12** min
Darwin	south	**12** h **52** min	**11** h **23** min
Melbourne	south	**14** h **47** min	**9** h **32** min
Dunedin	south	**15** h **45** min	**8** h **39** min

1. On **22** December, which city has the longest day? _____
2. On **21** June, which city has the longest day? _____
3. Which city has about the same daylight on both days? _____
4. How much longer is the day in Dunedin on **22** December than on **21** June? _____ hours _____ minutes
5. On **22** December, how much longer is the day in Melbourne than in London? _____ hours _____ minutes
6. When it is summer in Melbourne, in London it is **winter** **summer**

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Name _____ Date _____

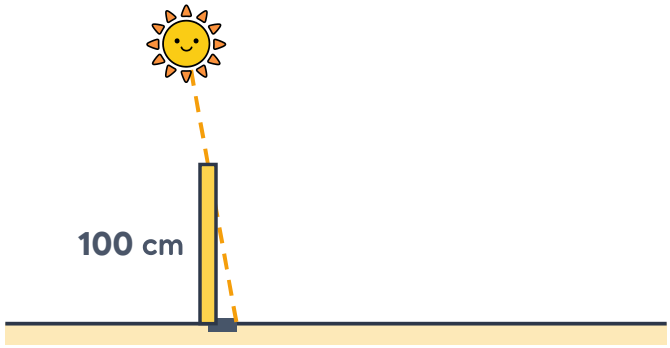


Summer Solstice Daylight

The shadow of a metre ruler at midday, in summer and in winter.

Sydney, 22 December

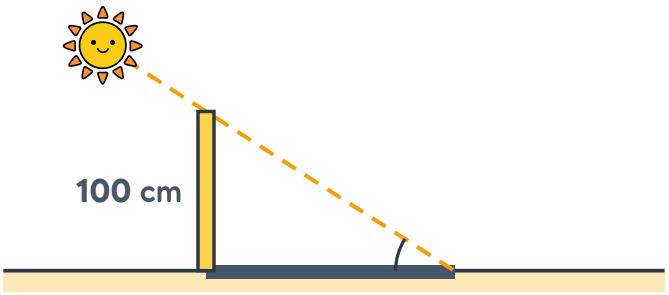
The sun is **80°** high at midday.



shadow 18 cm

Sydney, 21 June

The sun is **33°** high at midday.



shadow 156 cm

City	Shadow on 22 December	Shadow on 21 June	21 June shadow in m and cm	How much longer in June?
Sydney	**18** cm	**156** cm	**1** m **56** cm	**138** cm
Brisbane	**7** cm	**123** cm	____ m ____ cm	____ cm
Perth	**15** cm	**145** cm	____ m ____ cm	____ cm
Auckland	**24** cm	**175** cm	____ m ____ cm	____ cm
Hobart	**35** cm	**228** cm	____ m ____ cm	____ cm
Dunedin	**41** cm	**264** cm	____ m ____ cm	____ cm

100 centimetres make 1 metre.

1. Which city has the longest shadow on **21** June? _____
2. Which city has the shortest shadow on **22** December? _____
3. A shadow is longer when the sun is **higher** **lower**
4. At midday in Sydney, the sun is higher in **December** **June**

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Name _____ Date _____



Summer Solstice Daylight

Read each problem. Write the answer.

1. 

In Dunedin, the sun rose at **5:44** a.m. and set at **9:29** p.m. on **22** December. How long was the sun up?

Answer: _____ hours _____ minutes

2. 

On **22** December, Hobart has **15** hours **22** minutes of daylight. A day has **24** hours. How long is the night?

Answer: _____ hours _____ minutes

3. 

Melbourne has **14** hours **47** minutes of daylight on **22** December and **9** hours **32** minutes on **21** June. Find the difference.

Answer: _____ hours _____ minutes

4. 

The sun sets at **9:29** p.m. in Dunedin and at **8:40** p.m. in Auckland on **22** December. How many minutes later in Dunedin?

Answer: _____ minutes

5. 

Hobart has **15** hours **22** minutes of daylight on **22** December and **14** hours **49** minutes on **21** January. How many minutes less?

Answer: _____ minutes

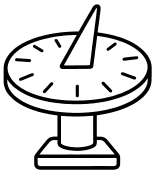
6. 

Leo's family wants **1** hour **35** minutes at the beach before sunset in Brisbane, at **6:43** p.m. When must they get there?

Answer: _____

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Name _____ Date _____

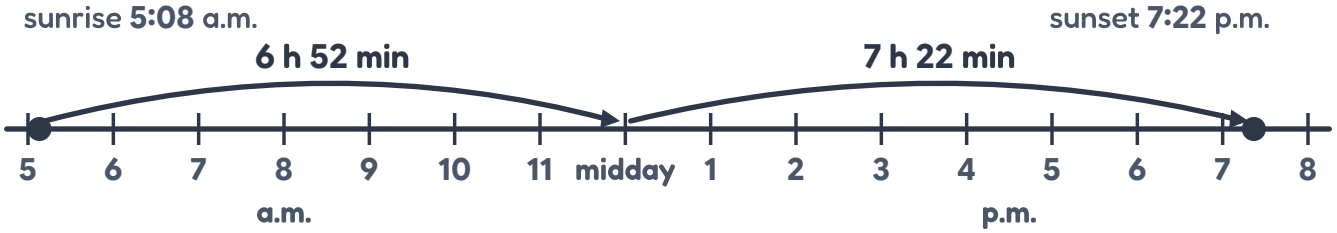


Summer Solstice Daylight

Find how long the sun is up in each city on 22 December.

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Find the time from sunrise to midday and from midday to sunset. Then add.



Perth: **6 h 52 min + 7 h 22 min = 13 h 74 min = 14 h 14 min**

City	Sunrise	Sunset	Sunrise to midday	Midday to sunset	Daylight
Perth	**5:08** a.m.	**7:22** p.m.	**6** h **52** min	**7** h **22** min	**14** h **14** min
Darwin	**6:19** a.m.	**7:11** p.m.	___ h ___ min	___ h ___ min	___ h ___ min
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Wellington	**5:44** a.m.	**8:54** p.m.	___ h ___ min	___ h ___ min	___ h ___ min

1. Which city has the longest day? _____

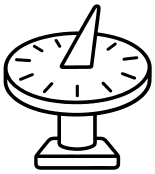
2. Which city has the shortest day? _____

3. How much longer is the day in Hobart than in Darwin? ___ hours ___ minutes

4. How many minutes longer is the day in Sydney than in Brisbane? ___ minutes

© 2026 Eggroll Games

Name _____ Date _____



Summer Solstice Daylight

Round each day to the nearest half hour. Then make a bar graph.

City	Daylight on 22 December	Nearest half hour
Canberra	**14** h **32** min	**14** h **30** min
Cairns	**13** h **9** min	
Alice Springs	**13** h **36** min	
Napier	**14** h **58** min	
Christchurch	**15** h **26** min	
Invercargill	**15** h **49** min	

To the nearest half hour

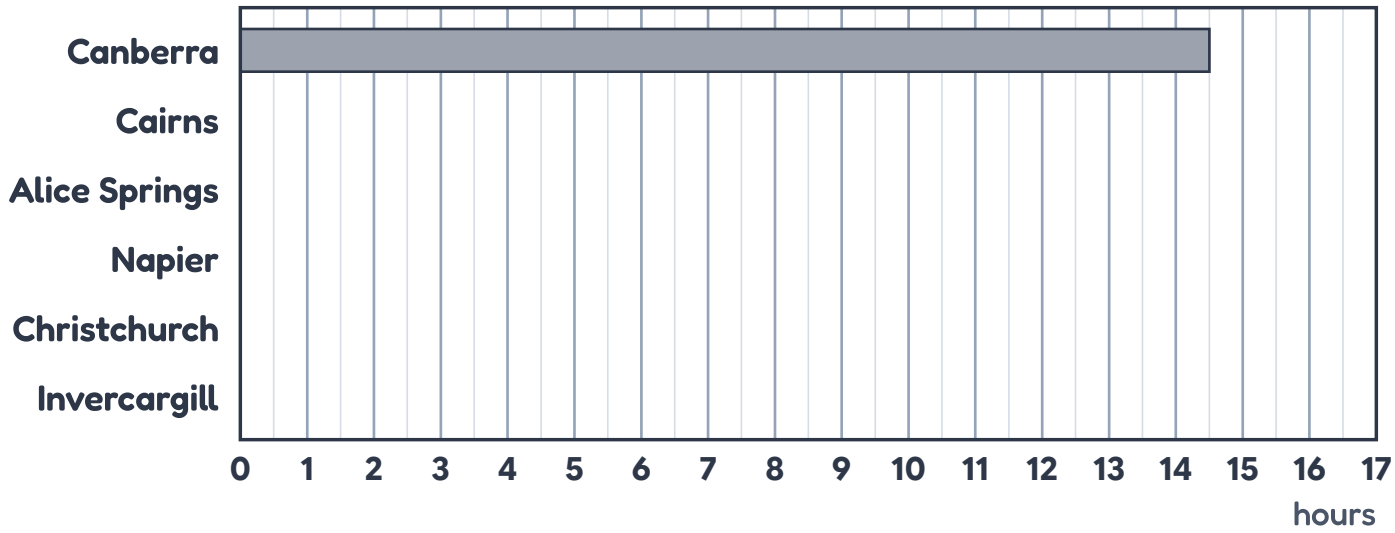
0 to 14 minutes:
round down to the hour.

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45 to 59 minutes:
round up to the next hour.

14 h 32 min rounds to 14 h 30 min.

Hours of daylight on 22 December



1. Which city has the most daylight? _____

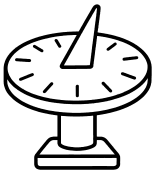
2. Which city has the least daylight? _____

3. How many more hours of daylight does Invercargill have than Cairns? _____ hours

4. How many cities have more than **15** hours of daylight? _____ cities

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Name _____ Date _____

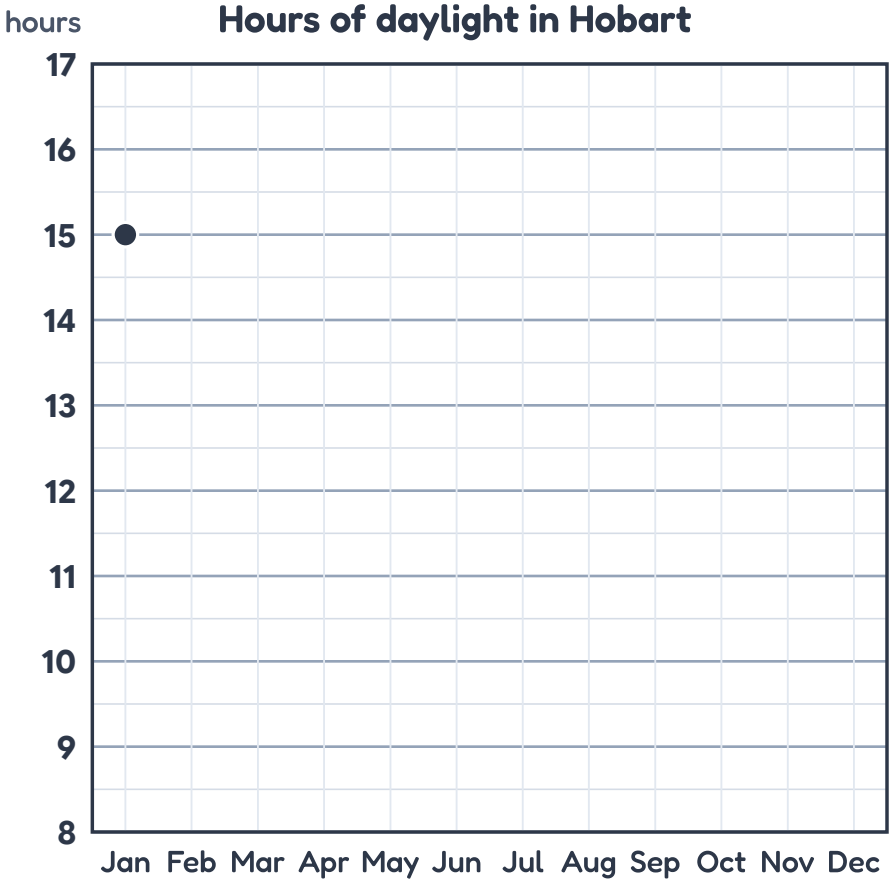


Summer Solstice Daylight

Make a line graph of a year of daylight in Hobart.

21st of	Daylight
January	**15** h
February	**13** h **30** min
March	**12** h
April	**10** h **30** min
May	**9** h **30** min
June	**9** h
July	**9** h **30** min
August	**10** h **30** min
September	**12** h
October	**13** h **30** min
November	**15** h
December	**15** h **30** min

Rounded to the nearest half hour.
January is plotted for you.



1. In which month is the day longest? _____

2. In which month is the day shortest? _____

3. How much more daylight is there in December than in June? ____ hours ____ minutes

4. Which two months have **12** hours of daylight? _____

5. How many months have more than **12** hours of daylight? _____ months

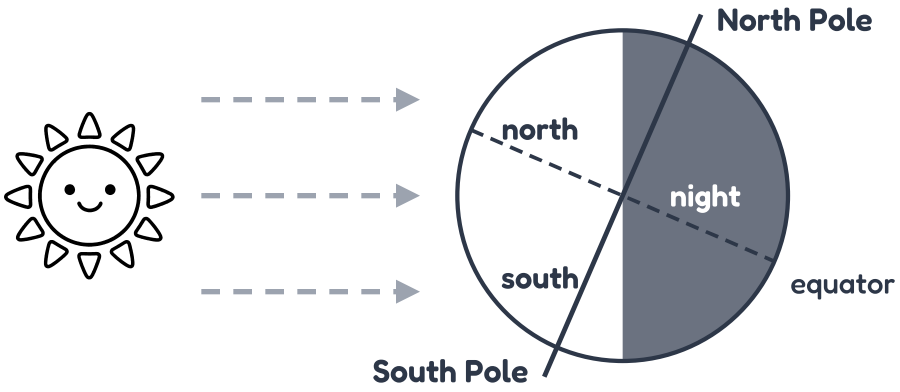
6. After which month do the days start to get longer again? _____

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Name _____ Date _____

Summer Solstice Daylight

The same two days in the north and in the south.



In December, the southern half of Earth leans towards the sun. Days are long: summer.

The northern half leans away from the sun. Days are short: winter.

City	Where it is	Daylight on 22 December	Daylight on 21 June
London	north	**7** h **50** min	**16** h **38** min
Singapore	near the equator	**12** h **3** min	**12** h **12** min
Darwin	south	**12** h **52** min	**11** h **23** min
Melbourne	south	**14** h **47** min	**9** h **32** min
Dunedin	south	**15** h **45** min	**8** h **39** min

1. On **22** December, which city has the longest day? _____

2. On **21** June, which city has the longest day? _____

3. Which city has about the same daylight on both days? _____

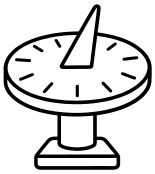
4. How much longer is the day in Dunedin on **22** December than on **21** June? ____ hours ____ minutes

5. On **22** December, how much longer is the day in Melbourne than in London? ____ hours ____ minutes

6. When it is summer in Melbourne, in London it is **winter** **summer**

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Name _____ Date _____

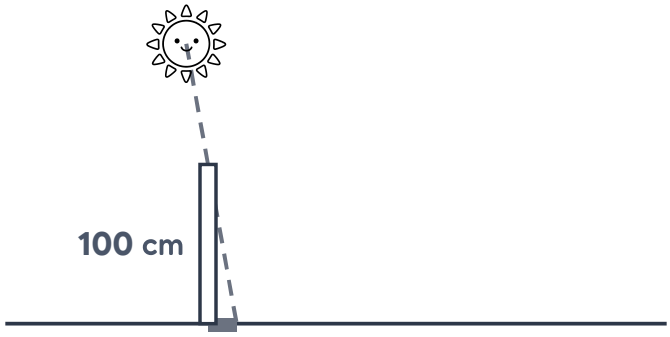


Summer Solstice Daylight

The shadow of a metre ruler at midday, in summer and in winter.

Sydney, 22 December

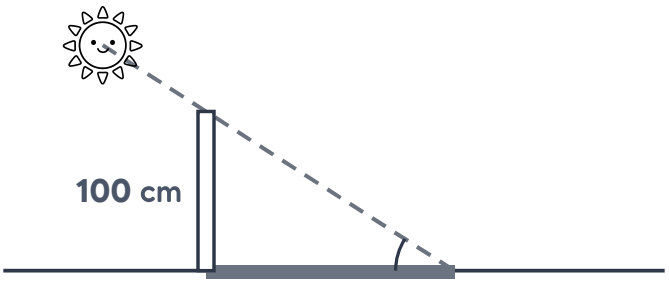
The sun is **80°** high at midday.



shadow 18 cm

Sydney, 21 June

The sun is **33°** high at midday.



shadow 156 cm

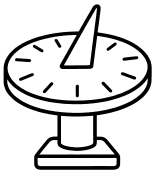
City	Shadow on 22 December	Shadow on 21 June	21 June shadow in m and cm	How much longer in June?
Sydney	**18** cm	**156** cm	**1** m **56** cm	**138** cm
Brisbane	**7** cm	**123** cm	____ m ____ cm	____ cm
Perth	**15** cm	**145** cm	____ m ____ cm	____ cm
Auckland	**24** cm	**175** cm	____ m ____ cm	____ cm
Hobart	**35** cm	**228** cm	____ m ____ cm	____ cm
Dunedin	**41** cm	**264** cm	____ m ____ cm	____ cm

100 centimetres make 1 metre.

1. Which city has the longest shadow on **21** June? _____
2. Which city has the shortest shadow on **22** December? _____
3. A shadow is longer when the sun is **higher** **lower**
4. At midday in Sydney, the sun is higher in **December** **June**

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Name _____ Date _____



Summer Solstice Daylight

Read each problem. Write the answer.

1. 

In Dunedin, the sun rose at **5:44** a.m. and set at **9:29** p.m. on **22** December. How long was the sun up?

Answer: _____ hours _____ minutes

2. 

On **22** December, Hobart has **15** hours **22** minutes of daylight. A day has **24** hours. How long is the night?

Answer: _____ hours _____ minutes

3. 

Melbourne has **14** hours **47** minutes of daylight on **22** December and **9** hours **32** minutes on **21** June. Find the difference.

Answer: _____ hours _____ minutes

4. 

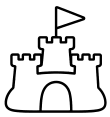
The sun sets at **9:29** p.m. in Dunedin and at **8:40** p.m. in Auckland on **22** December. How many minutes later in Dunedin?

Answer: _____ minutes

5. 

Hobart has **15** hours **22** minutes of daylight on **22** December and **14** hours **49** minutes on **21** January. How many minutes less?

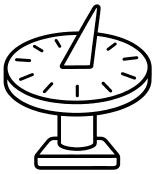
Answer: _____ minutes

6. 

Leo's family wants **1** hour **35** minutes at the beach before sunset in Brisbane, at **6:43** p.m. When must they get there?

Answer: _____

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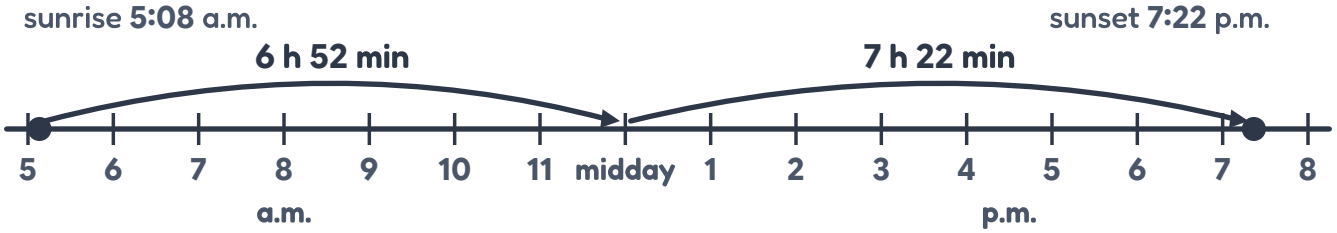


Summer Solstice Daylight

Find how long the sun is up in each city on 22 December.

Daylight is the time from sunrise to sunset.

Find the time from sunrise to midday and from midday to sunset. Then add.



Perth: **6 h 52 min + 7 h 22 min = 13 h 74 min = 14 h 14 min**

City	Sunrise	Sunset	Sunrise to midday	Midday to sunset	Daylight
Perth	**5:08** a.m.	**7:22** p.m.	**6** h **52** min	**7** h **22** min	**14** h **14** min
Darwin	**6:19** a.m.	**7:11** p.m.	**5** h **41** min	**7** h **11** min	**12** h **52** min
Brisbane	**4:50** a.m.	**6:43** p.m.	**7** h **10** min	**6** h **43** min	**13** h **53** min
Sydney	**5:41** a.m.	**8:06** p.m.	**6** h **19** min	**8** h **6** min	**14** h **25** min
Hobart	**5:28** a.m.	**8:50** p.m.	**6** h **32** min	**8** h **50** min	**15** h **22** min
Wellington	**5:44** a.m.	**8:54** p.m.	**6** h **16** min	**8** h **54** min	**15** h **10** min

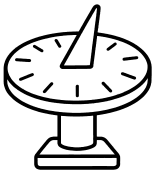
1. Which city has the longest day? Hobart

2. Which city has the shortest day? Darwin

3. How much longer is the day in Hobart than in Darwin? **2** hours **30** minutes

4. How many minutes longer is the day in Sydney than in Brisbane? **32** minutes

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Summer Solstice Daylight

Round each day to the nearest half hour. Then make a bar graph.

City	Daylight on 22 December	Nearest half hour
Canberra	**14** h **32** min	**14** h **30** min
Cairns	**13** h **9** min	**13** h
Alice Springs	**13** h **36** min	**13** h **30** min
Napier	**14** h **58** min	**15** h
Christchurch	**15** h **26** min	**15** h **30** min
Invercargill	**15** h **49** min	**16** h

To the nearest half hour

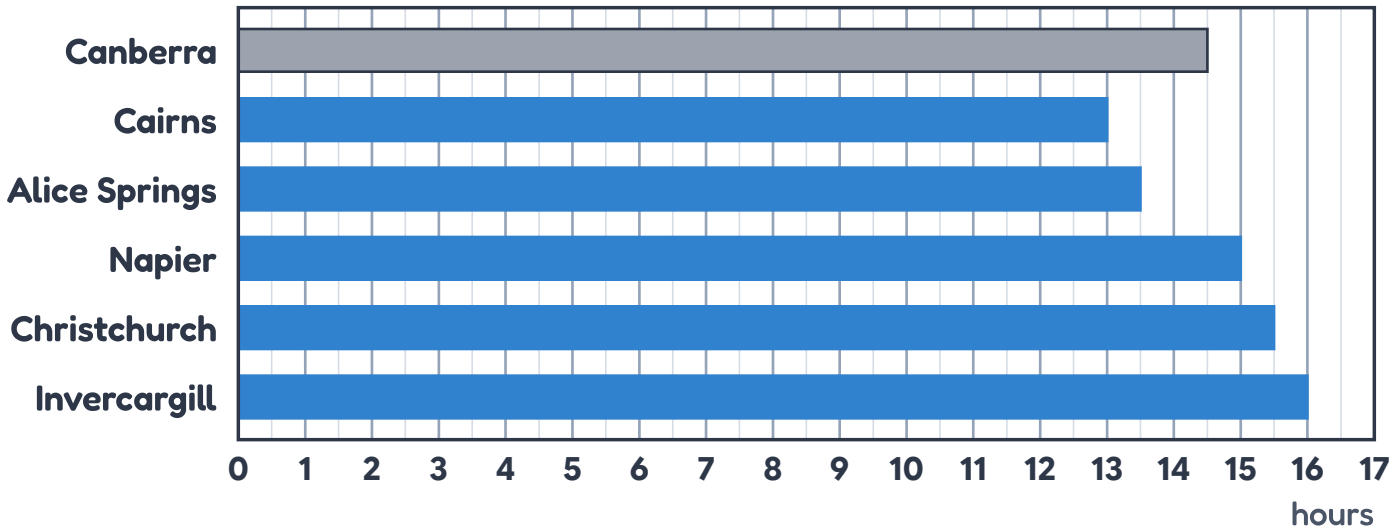
0 to 14 minutes:
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14 h 32 min rounds to 14 h 30 min.

Hours of daylight on 22 December



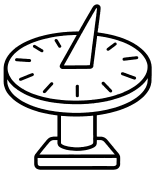
1. Which city has the most daylight? Invercargill

2. Which city has the least daylight? Cairns

3. How many more hours of daylight does Invercargill have than Cairns? 3 hours

4. How many cities have more than **15** hours of daylight? 2 cities

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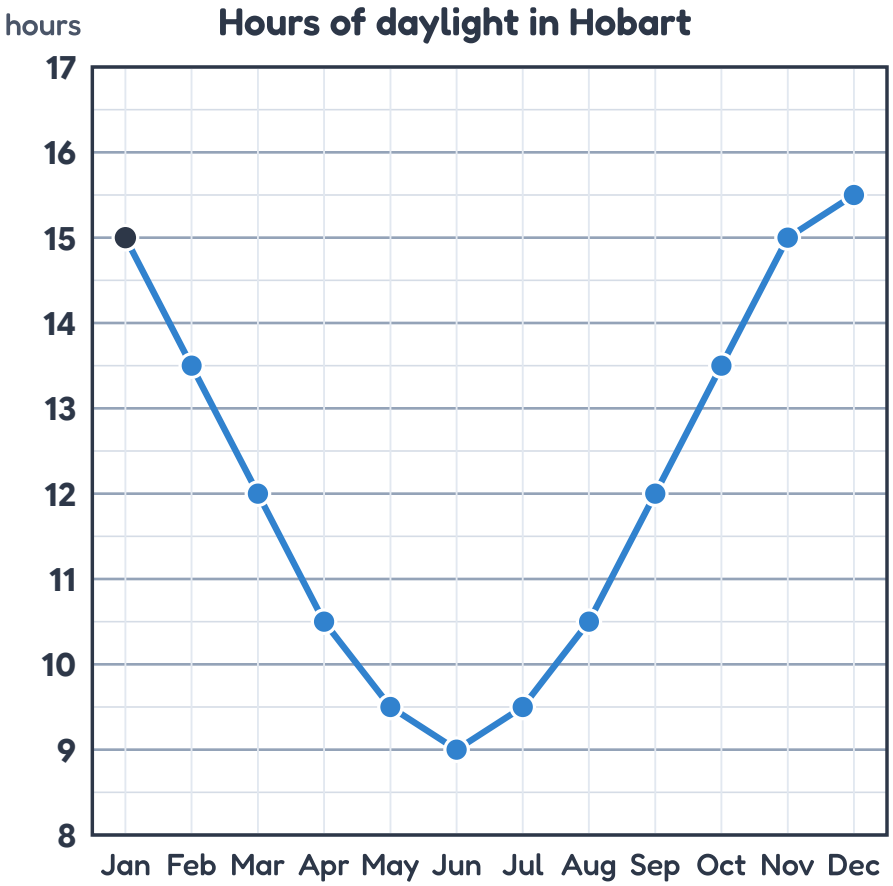


Summer Solstice Daylight

Make a line graph of a year of daylight in Hobart.

21st of	Daylight
January	**15** h
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March	**12** h
April	**10** h **30** min
May	**9** h **30** min
June	**9** h
July	**9** h **30** min
August	**10** h **30** min
September	**12** h
October	**13** h **30** min
November	**15** h
December	**15** h **30** min

Rounded to the nearest half hour.
January is plotted for you.



1. In which month is the day longest? December

2. In which month is the day shortest? June

3. How much more daylight is there in December than in June? 6 hours 30 minutes

4. Which two months have **12** hours of daylight? March and September

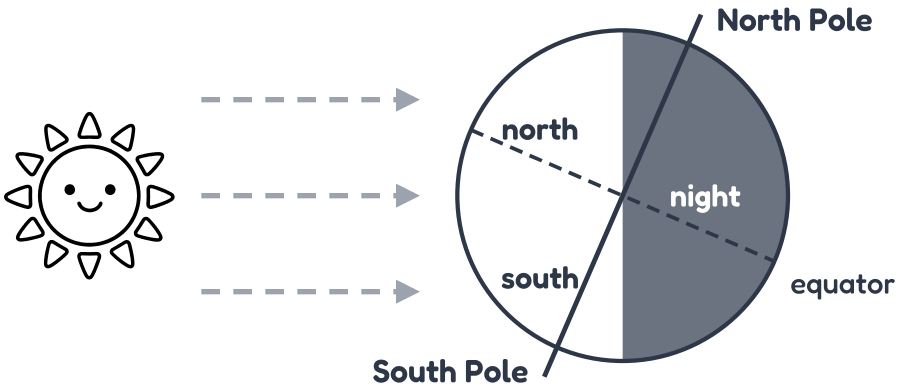
5. How many months have more than **12** hours of daylight? 5 months

6. After which month do the days start to get longer again? June

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Summer Solstice Daylight

The same two days in the north and in the south.



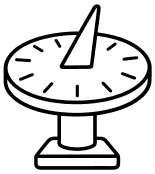
In December, the southern half of Earth leans towards the sun. Days are long: summer.

The northern half leans away from the sun. Days are short: winter.

City	Where it is	Daylight on 22 December	Daylight on 21 June
London	north	**7** h **50** min	**16** h **38** min
Singapore	near the equator	**12** h **3** min	**12** h **12** min
Darwin	south	**12** h **52** min	**11** h **23** min
Melbourne	south	**14** h **47** min	**9** h **32** min
Dunedin	south	**15** h **45** min	**8** h **39** min

1. On **22** December, which city has the longest day? Dunedin
2. On **21** June, which city has the longest day? London
3. Which city has about the same daylight on both days? Singapore
4. How much longer is the day in Dunedin on **22** December than on **21** June? **7** hours **6** minutes
5. On **22** December, how much longer is the day in Melbourne than in London? **6** hours **57** minutes
6. When it is summer in Melbourne, in London it is **winter** **summer**

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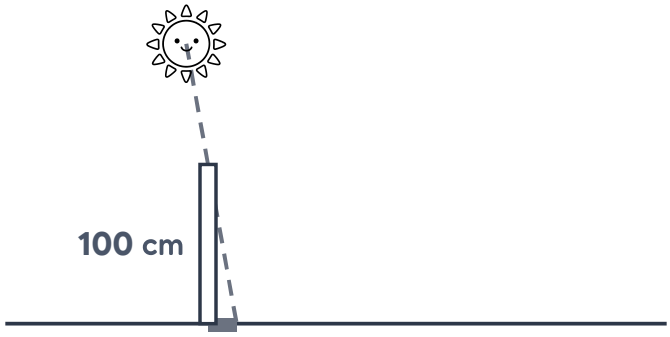


Summer Solstice Daylight

The shadow of a metre ruler at midday, in summer and in winter.

Sydney, 22 December

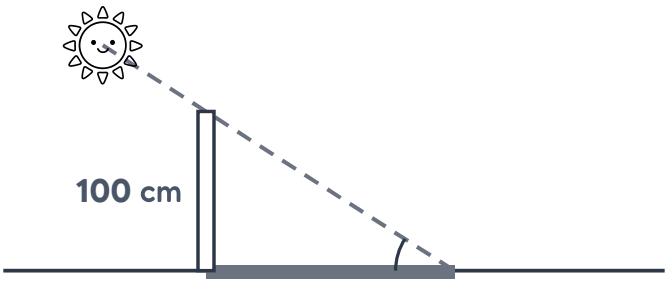
The sun is **80°** high at midday.



shadow 18 cm

Sydney, 21 June

The sun is **33°** high at midday.



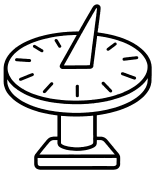
shadow 156 cm

City	Shadow on 22 December	Shadow on 21 June	21 June shadow in m and cm	How much longer in June?
Sydney	**18** cm	**156** cm	**1** m **56** cm	**138** cm
Brisbane	**7** cm	**123** cm	**1** m **23** cm	**116** cm
Perth	**15** cm	**145** cm	**1** m **45** cm	**130** cm
Auckland	**24** cm	**175** cm	**1** m **75** cm	**151** cm
Hobart	**35** cm	**228** cm	**2** m **28** cm	**193** cm
Dunedin	**41** cm	**264** cm	**2** m **64** cm	**223** cm

100 centimetres make 1 metre.

1. Which city has the longest shadow on **21** June? Dunedin
2. Which city has the shortest shadow on **22** December? Brisbane
3. A shadow is longer when the sun is **higher** **(lower)**
4. At midday in Sydney, the sun is higher in **(December)** **June**

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Summer Solstice Daylight

Read each problem. Write the answer.

1. 

In Dunedin, the sun rose at **5:44** a.m. and set at **9:29** p.m. on **22** December. How long was the sun up?

Answer: 15 hours 45 minutes

2. 

On **22** December, Hobart has **15** hours **22** minutes of daylight. A day has **24** hours. How long is the night?

Answer: 8 hours 38 minutes

3. 

Melbourne has **14** hours **47** minutes of daylight on **22** December and **9** hours **32** minutes on **21** June. Find the difference.

Answer: 5 hours 15 minutes

4. 

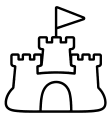
The sun sets at **9:29** p.m. in Dunedin and at **8:40** p.m. in Auckland on **22** December. How many minutes later in Dunedin?

Answer: 49 minutes

5. 

Hobart has **15** hours **22** minutes of daylight on **22** December and **14** hours **49** minutes on **21** January. How many minutes less?

Answer: 33 minutes

6. 

Leo's family wants **1** hour **35** minutes at the beach before sunset in Brisbane, at **6:43** p.m. When must they get there?

Answer: 5:08 p.m.

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