Summer Trivia

Use this key to check answers and read the explanations.

1. A U.S. weather report groups three whole months into meteorological summer. Which months are in that group?

A. June, July, and August
B. May, June, and July
C. July, August, and September
D. August, September, and October

Correct answer: A. June, July, and August
In the Northern Hemisphere, meteorological summer uses June through August.

2. A school compares June in Chicago with June in southern Australia. Which places are starting their colder season around then?

A. Both at the same time
B. Places around Chicago
C. Places in southern Australia
D. Neither during June

Correct answer: C. Places in southern Australia
Southern Australia is in the Southern Hemisphere, where June begins meteorological winter. Northern summer starts around the same time.

3. On a humid patio, beads of water form outside a sealed chilled bottle. What process made those drops?

A. Evaporation
B. Condensation
C. Freezing
D. Melting

Correct answer: B. Condensation
Water vapor from the surrounding air condenses into drops when it cools at the bottle’s surface.

4. A New Jersey advertisement from June 1933 invites people to sit in their own cars and watch a movie. Which venue is it advertising?

A. A television showroom
B. A radio studio
C. A railway movie car
D. A drive-in theater

Correct answer: D. A drive-in theater
Richard Hollingshead opened the outdoor drive-in in Pennsauken, near Camden, in June 1933.

5. Visitors near Elkmont in the Great Smoky Mountains watch pinpoints of light blink together in the dark. Which insects make the display?

A. Cicadas
B. Synchronous fireflies
C. Monarch butterflies
D. Dragonflies

Correct answer: B. Synchronous fireflies
The fireflies found at Elkmont are known for flashing in synchronized bursts.

6. In the Tour de France, the rider leading the overall individual standings wears which jersey?

A. Yellow
B. Green
C. Plain white
D. White with red dots

Correct answer: A. Yellow
The yellow jersey identifies the leader of the overall individual classification.

7. North of the tropics, which event marks the period of longest daylight and the start of astronomical summer?

A. The December solstice
B. The March equinox
C. The September equinox
D. The June solstice

Correct answer: D. The June solstice
The June solstice marks the Northern Hemisphere’s greatest tilt toward the Sun, producing the longest days of the year.

8. A warm afternoon heats the land faster than the nearby sea. Which direction does a sea breeze move at the surface?

A. Straight up over the water with no surface flow
B. From land toward water
C. From water toward land
D. It always blows along the coastline

Correct answer: C. From water toward land
Cooler air over the water moves inland as warmed air over the land rises.

9. A stargazing leader asks visitors to connect Vega, Altair, and Deneb. What pattern will they trace?

A. The Summer Triangle
B. Orion’s Belt
C. The Big Dipper
D. The Northern Cross

Correct answer: A. The Summer Triangle
Those three stars form the Summer Triangle, an asterism that is prominent on many Northern Hemisphere summer evenings.

10. An August skywatching sheet highlights a meteor shower associated with comet Swift–Tuttle. Which shower is named on the sheet?

A. Lyrids
B. Geminids
C. Quadrantids
D. Perseids

Correct answer: D. Perseids
The Perseids recur in Northern Hemisphere summer as Earth passes through debris left by Swift–Tuttle.

11. A 1933 drive-in charged 25 cents for the car and 25 cents for each person. At those rates, how much would one car carrying four people pay?

A. $0.75
B. $1.00
C. $1.25
D. $1.50

Correct answer: C. $1.25
The car charge is 25 cents. Four people cost another 100 cents, for a total of 125 cents.

12. A calendar lists June 1 and the June solstice as two summer start dates. Why can both be right in the Northern Hemisphere?

A. One uses the Moon’s phase and the other uses the date of the first storm
B. One uses whole calendar months and the other uses the Earth–Sun geometry
C. One applies only north of the Arctic Circle and the other only at the equator
D. One measures average rainfall and the other uses the time of sunset at a single city

Correct answer: B. One uses whole calendar months and the other uses the Earth–Sun geometry
Meteorological summer groups fixed months for climate comparisons. Astronomical summer begins at the June solstice.

13. Near the June solstice, which destination is best positioned to have the Sun remain above the horizon through midnight?

A. A city at 40° north latitude
B. A town at the equator
C. A beach at 30° south latitude
D. A station well north of the Arctic Circle

Correct answer: D. A station well north of the Arctic Circle
During northern summer, Earth’s tilted axis lets some high Arctic locations remain in sunlight throughout a full rotation.

14. Flares of light seem to spread outward from Perseus during a shower. What does the point they appear to spread from tell you?

A. The apparent direction of the meteor tracks as viewed from Earth
B. The exact distance to the comet’s nucleus that night
C. Which star in Perseus made the dust
D. How long every meteor will remain visible

Correct answer: A. The apparent direction of the meteor tracks as viewed from Earth
The apparent point is the radiant. It describes the viewing direction of the paths, even though the particles come from comet debris.

15. Around early July, Earth is near its farthest point from the Sun. Why can this still be summer in the Northern Hemisphere?

A. Earth rotates more slowly in July, so every place gets a longer day
B. Summer in the Northern Hemisphere requires Earth to be closest to the Sun
C. The northern half receives more direct sunlight and has longer days because of Earth’s tilt
D. The Southern Hemisphere reflects enough extra sunlight north to make summer

Correct answer: C. The northern half receives more direct sunlight and has longer days because of Earth’s tilt
Earth’s orbital distance varies slightly. The distribution of sunlight caused by the tilt of Earth’s axis drives the seasons.